

HIGHER EDUCATION MATTERS

magazine

A GATEWAY TO HIGHER LEARNING INITIATIVES

Mastering the Cognitive Domain

Outcome Based Education - Part V

Edu-Apps for Children

What parents & Educators should
look for and ignore

Institutional Development Plan (IDP)

for Higher Education Institutions

Scholar View

The Kerala Margam: Prof. Gangam Prathap

Special Articles

The Rise and Fall of UGC Care List
Landmark law allows payouts to 'zombie universities'
Transformation of Academic Writing
Bridging the Gender Gap
Kerala Knowledge Consortium (KKC)
UNESCO-GEM Report 2025

HIGHER EDUCATION MATTERS

A GATEWAY TO HIGHER LEARNING INITIATIVES

SUBSCRIPTION**OFFER
CONTINUES****Print Edition****Rs. 1000/-
only****ANNUAL SUBSCRIPTION**

- High print quality
- Laminated cover
- 170 & 100 GSM
- High Resolution
- Worth on your table
- Digital version on offer
- 12 ISSUES
- Best updates of higher education

worth for collection**ADVERTISEMENT TARIFF**

SIZE	TYPE	RATE (₹)
Full Page (Back cover)	colour/black & white	20000
Full Page (inner side of front & back covers)	colour/black & white	15000
Full Page (Inner pages)	colour/black & white	10000
Half Page (Inner pages)	colour/black & white	5000
Quarter Page (Inner pages)	colour/black & white	2500

SUBSCRIPTION FORM**SUBSCRIBE NOW TO****'HIGHER EDUCATION MATTERS' AND GAIN ACCESS TO THE PRINT EDITION**

Name: _____

Designation: _____

Address: _____

City _____ District _____ State _____

PIN code (Mandatory): _____ Mobile No.: _____

Landline No. _____ Email ID: _____

PAYMENT DETAILS

Cheque No./ Draft.No. _____ Bank _____

Date: _____ Amount: Rs _____

Payable to **'The Kerala State Higher Education Council'**Name of Bank: **Union Bank of India** A/c No: **336302010139637** IFSC: **UBIN0533637** Branch: **Trivandrum Main**

If UPI payment, mention UTR No. _____ Date _____

Send to **contact.hematters@gmail.com** contact no.9446787902, 7561018708

The Kerala State Higher Education Council, Science and Technology Museum Campus Vikas Bhavan P.O.,
Thiruvananthapuram-695033, Kerala, India Phone: 0471 2301292 Fax: 0471 2301290 Email: heckerala@gmail.com

HIGHER EDUCATION MATTERS

A GATEWAY TO HIGHER LEARNING INITIATIVES



Opening Note

Editor in Chief

Publisher: The Kerala State Higher Education Council

Editor in Chief: Rajan Gurukkal Vice Chairman
Kerala State Higher Education Council

Managing Editor: Rajan Varughese Member Secretary
Kerala State Higher Education Council

Executive Editor: Manulal P. Ram

Editor: Deepika Lakshman

Address: Higher Education Matters, Kerala State Higher Education Council, Science and Technology Museum Campus, Vikas Bhavan P.O. Thiruvananthapuram-695033, Kerala State, India

Advertising & Sales Enquiries: contact.hematters@gmail.com

Customer Enquiries: contact.hematters@gmail.com

7561018708, 9446787902, 9846589662

Design & Lay Out: Kerala State Higher Education Council

Cover Photo & Photography: Canva Pro. Prashobh & Arun



Volume 1-Issue 5: June 2025: 60 pages

Our aim is to serve students, teachers, administrators and other stakeholders by providing valuable insights into the educational scenario, innovations in teaching and learning, policy changes, and career opportunities. Whether you're navigating the challenges of administration, teaching the next generation, preparing for your future career, or thinking of transforming your educational landscape, this magazine is your first hand information and expert perspectives for your journey.

Disclaimer

The views and opinions if any expressed in this magazine are those of the contributors and do not necessarily reflect the official policy or position of the publisher. While every effort has been made to ensure the accuracy of information provided, the magazine assumes no responsibility for errors, omissions, or any outcomes related to the use of this information. Reader discretion is advised.

Curated Stories

Higher Education Matters Magazine prides itself on the educational content published in the magazine in print. We believe knowledge is power, which is why we work so hard to cover topics about local to global issues and initiatives pertaining to higher education. Throughout the magazine you may come across articles open to every reader irrespective of online or print editions. If you have any questions about the nature of the magazine, please reach out to us.

Sponsors

We receive stories and observations fulfilling the aims and objectives of the magazine from the like minded people engaged with higher education sector. We take on partners who are providing articles & news and whose contributions fall within our editorial guidelines.

Copyright Statement and Policy:

The articles published on this print and the magazine's web site owns by the editorial team. Portions of the articles on this web site may be freely redistributed in other media and non-commercial publications with the due mention of their source.

Higher Education Matters Magazine, a monthly publication where we provide diverse and engaging content for informational purposes only. While we strive for accuracy, we cannot guarantee the completeness or reliability of all content. The views expressed are those of the contributor and do not necessarily reflect our official stance. We are not responsible for external links or user-generated content, and we disclaim liability for any damages resulting from the use of our site and information. All content is protected by copyright, and unauthorized use is prohibited unless with due acknowledgement of the source. By using our information, you agree to this disclaimer and our terms. This magazine should be used as a source of inspiration only.

Questions & Comments may be sent to: contact.hematters@gmail.com

Higher Education Matters does not endorse the content of advertisements or any promotional features of third party printed in the magazine

Dear Readers,

As the contours of higher education shift dramatically, this edition of *Higher Education Matters* captures a moment of both reflection and reinvention. From digital learning tools to demographic transitions, institutional reform to gender equity, the decisions we make today will shape the futures we create. We include an article that examine the hidden complexities of educational apps. While they often promise quick results and flashy interfaces, true learning value demands a deeper look. Parents and educators must move beyond ratings and marketing to ask: What actually fosters understanding, curiosity, and growth?

Kerala's forward-thinking approach to research and development—the Kerala Margam—takes inspiration from New Zealand's focused R&D model. It offers a clear, contextual roadmap for aligning academic inquiry with real-world impact. Alongside this, included features on Institutional Development Plan and the Kerala Knowledge Consortium, announcing a bold commitment to inclusive and innovative higher education.

Despite Kerala's impressive literacy statistics, significant disparities in women participation in research remain. The pioneering journeys of Dr. Janaki Ammal and Dr. Tessy Thomas remind us that representation is not symbolic but foundational to progress.

Finally, we witness the rise of AI in student writing. While it challenges long-held academic norms, it also opens up prospects of opportunity. Instead of resistance, we must indulge in a deeper probing of our didactic priorities such as critical thinking, ethical reasoning, and intellectual curiosity at the core.

In this time of transformation, may this edition not only offer insights, but provoke the right questions.

Warmly,
The Editor-in-Chief



LinkedIn

YouTube



CONTENTS

8

**EDUCATIONAL APPS
FOR CHILDREN:**
WHAT PARENTS AND
EDUCATORS SHOULD
LOOK FOR AND
IGNORE



**Emma Liptrot &
Adam Kenneth Dubé**
Mc Gill University

11

THE KERALA MARGAM:
A new R&D path for
Kerala, aligning science
with local needs,
inspired by New
Zealand's efficient,
sector-focused model



Gangan Prathap

15

**UNESCO
GEM REPORT
2025**
'TRANSFORMING
HIGHER EDUCATION
IN A CHANGING
WORLD'
Key Insights from the
Report



16

**THE RISE AND FALL
OF THE UGC-CARE
LIST**

From promise to
controversy: how
UGC's CARE List
sought to safeguard
Indian academia yet
collapsed under
flaws, criticism, and
reform

18

**LANDMARK LAW
ALLOWS PAYOUTS TO
'ZOMBIE UNIVERSITIES'**
SOUTH KOREA STORY
ON UNECONOMIC
UNIVERSITIES

Yumi Jeung

22

**Bridging the Gender
Gap: Women's
Growing Role in
STEM and Scientific
Research in Kerala**

T.S. Preetha

CONTENTS

26

TRANSFORMATION OF ACADEMIC WRITING IN THE AGE OF ARTIFICIAL INTELLIGENCE

Exploring how generative AI is reshaping student writing, challenging assessment norms, and redefining the purpose of academic literacy

Jijo P. Ulahannan

30

INSTITUTIONAL DEVELOPMENT PLAN (IDP) FOR HIGHER EDUCATION INSTITUTIONS

Highlights towards the path of preparing IDP for Institutions

34

KERALA KNOWLEDGE CONSORTIUM (KKC) CENTERS

Building a collaborative, community-responsive research network linking academia, industry, and society to shape Kerala's future as a global knowledge hub

Sudheendran K.



37

MASTERING THE COGNITIVE DOMAIN

A comprehensive look at Bloom's cognitive processes and their central role in shaping effective, measurable learning outcomes

OBE-PART V

REGULAR UPDATES

06 NEWS FEED

- Events & News

43 PUBLICATIONS

- Kerala State Higher Education Council

45 NEWS

- KSHCE Updates
- University Updates
- Global Campus

55 GLOSSARY

- Higher education glossary

56 CONNECT

- Important contacts @ Universities

UPCOMING EVENTS

India Higher Education Research Conference (IHERC)

21-22 November 2025 New Delhi

Organized by the India Higher Education Research Network at IIT Delhi's R&I Park, this flagship conference will address themes like access, employability, policy, financing, sustainability, internationalization, and research excellence in Indian higher education. Participants will include researchers, policymakers, and education leaders

India Higher Education Research Network (IHERN) is organizing the flagship higher education research conference. The India Higher Education Research Conference (IHERC) will be conducted on 21-22 November, 2025 at IIT Delhi. The conference will serve as a platform for presenting high-quality research of relevance to Indian higher education, and also for discussing practice and policy issues relating to Indian higher education. The conference will enable and promote research in the scholarly field of higher education, and linking the same with the practice and policy of higher education in India.

IHERC 2025 will be at the intersection of various scholarly fields, including but not limited to higher education studies, the empirical context of higher education in India, and the practice and policy of higher education in India. The conference expects to have participation from the global scholarly community, with interests in Indian higher education.

Higher education research is a growing field that explores how universities and colleges function, evolve, and impact society. It draws from disciplines like sociology, economics, public policy, and education studies to understand how students learn, how institutions are governed, how policies are shaped, and how teaching and research can be made more inclusive, equitable, and effective.

Andhra University Centenary Celebrations – Academic Lectures & Seminar Series

8 to 9 August 2025 at Bangalore

As part of its 100th anniversary, Andhra University is organizing several high-impact academic engagements throughout September 2025. Notably, the university will host endowment lectures in the departments of Chemistry (September 4) and Electrical Engineering (September 15), delivered by eminent scholars and industry professionals. These lectures aim to reflect on the evolution of academic excellence at Andhra University while introducing students and faculty to cutting-edge research and emerging global trends. These sessions are expected to serve as a platform for cross-generational academic dialogue and inspiration for aspiring researchers.

In parallel, the Department of Civil Engineering will host a national seminar on “Special Concrete for Infrastructure Needs” on September 7, highlighting innovations in material science, structural durability, and eco-friendly concrete technologies. This gathering will bring together professionals from industry, academia, and government to discuss India's infrastructure goals and sustainable construction methods. The event underscores the university's intent to promote interdisciplinary research aligned with national development priorities.

NIPER Chandigarh – Training on Pharmaceutical GMP Audits (Sep 15–26)

The National Institute of Pharmaceutical Education and Research (NIPER), Chandigarh, will host a short-term professional training on “Pharmaceutical GMP Audits and Self-Inspections” from September 15 to 26, 2025. This training program, supported by the Ministry of External Affairs under the ITEC initiative, targets pharmaceutical professionals and researchers from India and abroad. The curriculum covers best practices in Good Manufacturing Practice (GMP), quality audits, regulatory compliance, and pharmaceutical risk assessment. Hands-on workshops, mock audits, and interactive lectures will guide participants through real-world applications of GMP systems. This training is especially valuable for professionals working in pharma R&D, production, and quality assurance.

Khelo India University Games –

November 2025

Scheduled for November, Rajasthan will host the fifth edition of India's premier university-level multi-sport competition. About 6,000 athletes will compete across 25 disciplines, including athletics, archery, boxing, and swimming. Poornima University and Rajasthan University co-host the event, which features competitions at prominent venues such as the Sawai Mansingh Stadium and Jagatpura Shooting Range. A talent hunt program akin to the Target Olympic Podium Scheme will also be launched to nurture budding athletes.

Traditional Knowledge Systems–Training

Starting September 2025 IIT Mandi & IIT Gandhinagar –



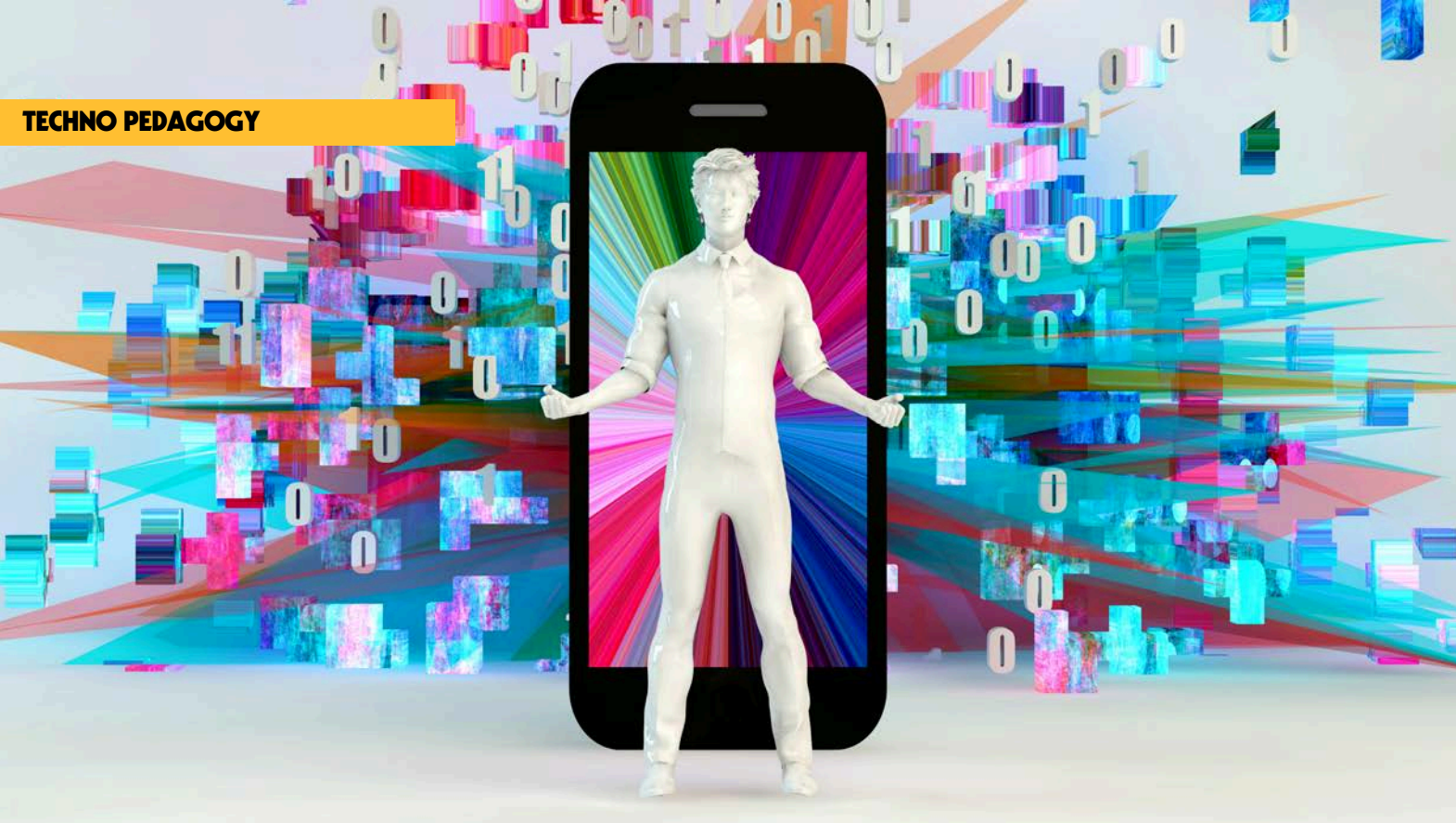
IIT Mandi and IIT Gandhinagar are collaboratively launching an ambitious training programme on Traditional Knowledge Systems (TKS), aimed at college teachers across India. Beginning in September 2025, this initiative seeks to reintroduce and integrate India's rich heritage—including Indian philosophy, Sanskrit, Ayurveda, classical sciences, yoga, Vedic literature, and Upanishads—into modern education through a series of intensive 5–7 day workshops. Designed for small batches of five teachers per session, the first phase of the programme will train 50 handpicked graduates and postgraduates. This effort is part of a broader cultural revitalization push under the Government of India's New Education Policy (NEP 2020) and is intended to infuse holistic, context-rich learning into higher education by reconnecting educators with India's intellectual and spiritual traditions. The programme not only emphasizes academic integration but also aims to foster a sense of cultural pride, critical inquiry, and ethical grounding among both teachers and students.

MOOC on Indian Knowledge System: Concepts and Application

The University Grants Commission (UGC) has launched an online MOOC titled "Indian Knowledge System: Concepts and Application" on the SWAYAM platform, aiming to integrate India's traditional knowledge into modern education as envisioned by the National Education Policy (NEP) 2020. This course is open and free for all and targets educators across disciplines—engineering, science and technology, humanities, and social sciences. It is structured using four instructional quadrants: recorded video lectures, downloadable study materials, self-assessment quizzes, and discussion forums for peer learning. The curriculum explores a wide range of themes such as ancient Indian mathematics, astronomy, measurement systems, linguistic traditions, psychology, wellness practices like Ayurveda and yoga, architectural heritage, and philosophical foundations. The UGC's broader goal is to train 1.5 million college teachers in Indian Knowledge Systems (IKS) by 2025 through such digital learning initiatives. This MOOC serves both as a scholarly introduction to India's intellectual legacy and as a tool for educators to contextualize modern curricula in culturally rooted frameworks.

International Ranking for Universities in Kerala

In June 2025, Kerala's institutions marked significant international standing: Mahatma Gandhi University rose as a top national contender—securing 4th place among Indian universities in the THE Asia Rankings and earning a global spot in the 401–500 band of THE World Rankings; University of Kerala maintained its global visibility with a QS Asia rank of 339 and emerged in EduRank's 2025 global ranking at ~2141, while CUSAT continued to hold positions in both world and Asian tiers. Together, these reflect Kerala's growing visibility on the international academic stage.



Educational apps for children: What parents and educators should look for and ignore

Authors
**Emma Liptrot &
Adam Kenneth Dubé**

Educators and parents buy educational apps (EduApps) to help children learn, bringing in billions of dollars for the mobile app industry, a significant portion of which goes into the pockets of leading app stores.

But when people visit app stores, they are overwhelmed with hundreds of thousands of options. Children can learn from well-designed EduApps, but choosing bad apps wastes schools' and families' time and money.

When choosing EduApps, our research from the Technology Learning and Cognition lab at McGill University's Faculty of Education shows educators and parents rely heavily on others' judgements, like star ratings.

But app stores are not designed to showcase the information consumers need to judge an app's educational quality. For example, Apple says it offers "a highly curated App Store where every app is reviewed by experts and an editorial team helps users discover new apps every day," yet guidelines do not include educational quality standards.

What to ignore

We advise educators and parents to ignore information unrelated to educational quality, like:

1. User ratings & reviews:

Popular EduApps in Apple's and Google's app stores typically have very positive ratings (above four stars). Yet, experts still raise concerns about their quality and expert-approved apps do not necessarily receive the highest star ratings. Written reviews are rarely more informative. Research shows most reviews simply praise apps rather than explaining specific features.

Even if reviews mention educational aspects, few reviewers have the background to make informed judgements of quality. Anyone can review an app – even children, who like apps that allow them to have fun while they learn but may not know what learning features are necessary to help them learn best.

2. Apple or Google rankings

Educators and parents may visit an app store's "top charts" lists to find EduApps. Yet, how Apple's and Google's algorithms determine which apps "top the charts" is unclear. Plus, rankings are not related to educational quality, making them unreliable for choosing high-quality apps.

3. Recommendations from app review websites

Educators and parents might look to external app review websites like Common Sense Media for recommendations. But research shows many of the apps recommended by these websites still need substantial improvement – and only a fraction of apps get reviewed. Avoid relying only on recommendations from these websites.

Even if reviews mention educational aspects, few reviewers have the background to make informed judgements of quality. Anyone can review an app – even children, who like apps that allow them to have fun while they learn but may not know what learning features are necessary to help them learn best.

What to look for

We propose looking for five educational benchmarks of quality that can be found in an app's written description, where developers describe the app and its features.

1. Curriculum: What apps teach

At the bare minimum, EduApps must include content that is covered in an established learning program. Yet, many EduApps are what researchers call "educational misfits" because they are only weakly related to education, if at all. Look for apps that clearly state which curriculum their content is based on (for example, a particular provincial curriculum, a supplemental curriculum for learning an Indigenous language) or detail the content (suitable for grades 1–3 math). Don't bother with an app that doesn't tell you what it covers.

2. Learning theory: How apps teach

An app developer's ideas about learning – their learning theory – impacts what tasks children are asked to do and what kinds of learning can happen. An app that uses repetition to help children memorize facts promotes different learning outcomes and meets different needs than an app that encourages experimentation and discovery. Look for apps that describe how they teach. Choose ones using approaches that align with your needs.

If an app doesn't tell you how it helps children learn, it's not worth your time.

3. Scaffolding: How apps support learning

EduApps should include supports that help children build their understanding and accomplish learning goals. These supports (called scaffolding) can include hints or instructions when children get stuck and breaking down complex tasks into smaller chunks or adapting difficulty to match children's abilities. Look for apps with supports that help guide and structure children's learning.

4. Feedback: How apps correct learning

If we want children to learn from their mistakes, feedback is essential. Look for apps that give children informative feedback so they know where they went wrong and why.

5. Educational expertise: Who made the app

Many app developers are not education experts, and their priorities may not align with those of educators and parents. Look for apps that consult educational experts like teachers or researchers so they are designed with children's learning needs and abilities in mind.

Other considerations

Our five educational benchmarks focus on the potential educational value of apps. However, other considerations related to children's safety are also important, like how apps manage children's privacy and data and how children are exposed to advertising. Working together to choose better apps.

The current state of app stores makes finding a good EduApp like searching for a drop in the ocean. To aid their search, educators and parents can look for educational benchmarks, and watch our video on YouTube, "How to find an educational app."

We conducted research that showed this helped parents identify quality educational apps via the benchmarks discussed above.

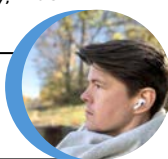
Finding a good EduApp shouldn't be so hard. These profitable app stores have a duty to help ensure families' and schools' resources are not wasted on bad apps. We call on Apple and Google to redesign their app stores to bring educational benchmarks to the surface. Such a redesign would make it easier to find good apps among a sea of possibilities.

With so many apps available, app store owners, researchers, educators and parents must work together to get the best EduApps into kids' hands.

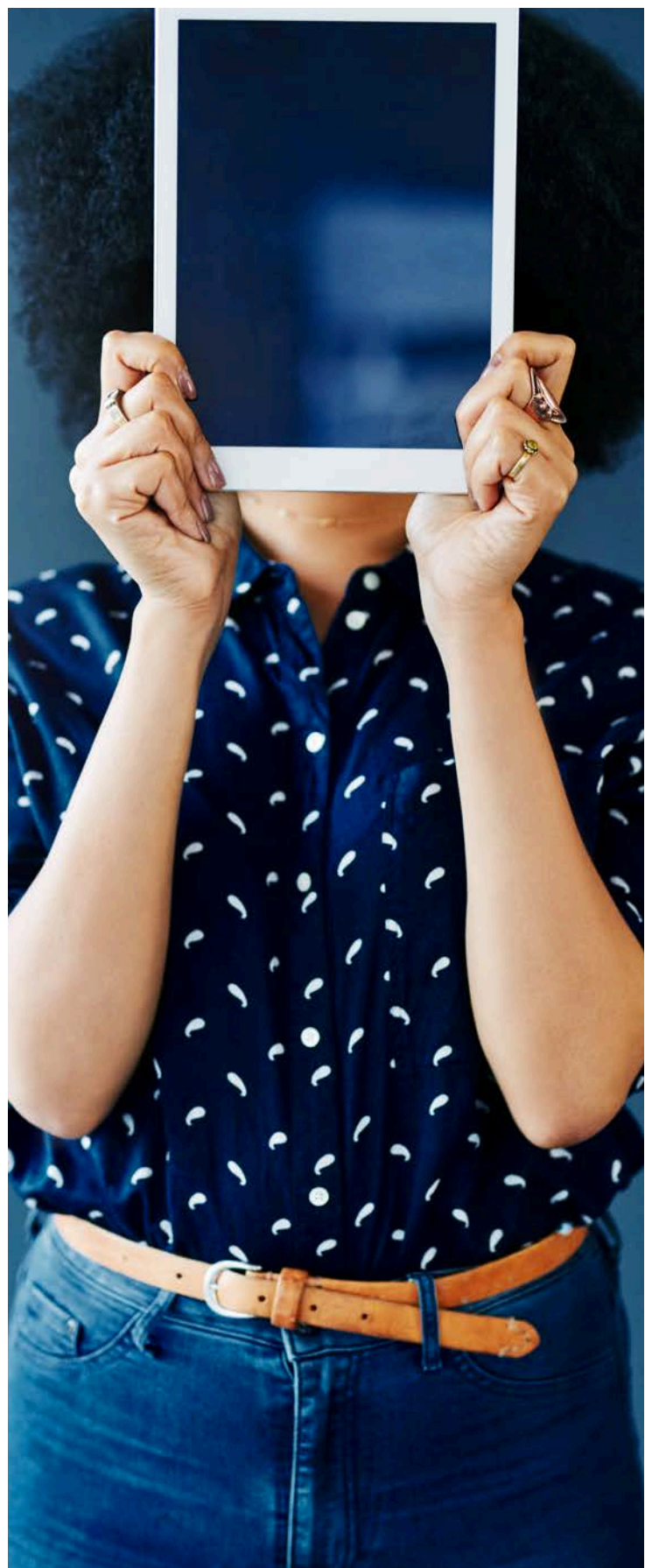


Emma Liptrot,
PhD student, Department of Educational
and Counselling Psychology, McGill
University

Adam Kenneth Dubé,
Associate Professor of Learning Sciences,
Faculty of Education, McGill University



Source: This article was originally published on
<https://theconversation.com/global>
Published: September 2, 2024





The Kerala Margam

Gangan Prathap



ChatGPT
<https://chatgpt.com/share/682c0703-2044-8012-a985-ae2032006a38>

1. Introduction:

From the Kerala Model to a Kerala Margam

It is time to leave the clichéd Kerala Model behind and chart out a new Kerala pathway so that it can be a pioneer in aligning research with real-world needs. I have found no exemplar which is better than what New Zealand has charted out over the years. So, how do we go about justifying this?

2. The Full Time Equivalent Researcher (FTER) and Gross Expenditure on Research and Development (GERD) indicators

Derek de la Solla Price was a preeminent historian and scientometrician who pointed out that the composite ratio $(\text{GERD}/\text{GDP})/(\text{FTER}/\text{Population})$ is a meaningful number when it comes to assessing how well equipped a country is to translate science and technological leadership to global economic success. Here, GERD is the Gross Expenditure on Research and Development and GDP is the Gross Domestic Product. Thus (GERD/GDP) is a ratio of what fraction of economic activity is directed to purely scientific and innovative aims. Similarly, the ratio $(\text{FTER}/\text{Population})$ is the proportion of the population that is engaged in pursuing R&D activities. FTER, or Full Time Equivalent Researchers, takes into account the fact that all designated science and engineering personnel do not devote 100% of their time to research. Thus, the composite ratio is a ratio of ratios and is a sort of Leverage term.

Let us look at how these ratios vary for some comparator countries. This is shown in Table 1. The higher the ratio, the more GERD is being spent per researcher, relative to GDP per capita. India's high value (~25) reflects low researcher density relative to even modest GERD — meaning each researcher is, in a sense, carrying a large "share" of national R&D expenditure. South Korea's low value (~5.3) reflects a dense research ecosystem where GERD is efficiently distributed over many researchers. This "leverage" metric (as Derek de Solla Price hinted) functions like a stress index:

Low ratios (5–8): Balanced systems.

High ratios (15–30): Understaffed systems or top-heavy expenditure.

It's a powerful diagnostic for understanding the structural balance between funding and manpower in national R&D. Kerala, will be like India with a very high ratio indicating an understaffed system (too few researchers), i.e., low researcher density for their level of R&D spending.



It's a powerful diagnostic for understanding the structural balance between funding and manpower in national R&D. Kerala, will be like India with a very high ratio indicating an understaffed system (too few researchers), i.e., low researcher density for their level of R&D spending.

3. The New Zealand Model

My earlier studies in this area suggested that New Zealand was one of the best leveraged countries. If I remember correctly, the composite ratio was something like 3. ChatGPT, with its ability to access a much vaster base of information, says that it is 3.5. NZ has a GERD allocation which is 1.47% of GDP (2022), and an FTER/Population of 0.42 (4,207 researchers per million inhabitants in 2005.)

Such a low composite ratio suggests that New Zealand's R&D expenditure is well-aligned with its researcher density, indicating an efficient utilization of research funds relative to its economic output and research workforce. This further suggests that its R&D is strategically aligned with its economic priorities. It has historically prioritized agricultural research, including animal husbandry, pasture science, dairy innovation, and biosecurity – sectors where it has comparative economic advantage. It has maintained a compact, targeted research infrastructure (e.g., AgResearch, Plant & Food Research, Manaaki Whenua – Landcare Research) that tightly links scientific output to economic returns. It has fostered public-private partnerships and mission-driven research funding, with a focus on export-driven industries like dairy, meat, wool, and kiwifruit.

4. The Kerala Margam

What lessons can Kerala learn from New Zealand?

It has a small population (~35 million), high literacy, and strong health indicators. Its dominant sectors are: agriculture, fisheries, plantation economy, public health, and tourism. It has successfully experimented with a long tradition of decentralized planning and public engagement. It has the right scale, social infrastructure, and policy ethos to emulate the focused, sector-aligned, mission-driven R&D model that New Zealand has pioneered.

Kerala has the right scale, social infrastructure, and policy ethos to emulate the focused, sector-aligned, mission-driven R&D model that New Zealand has pioneered.



First, Kerala must identify core economic sectors for R&D Focus. Table 2 shows some of the core areas in which Kerala can concentrate R&D resources. This does not happen right now. Just like New Zealand has its Crown Research Institutes (CRIs), Kerala could set up 5–6 sectoral research clusters with:

- Small, agile labs co-located with universities or Krishi Vigyan Kendras
- Industry partners (e.g., seafood exporters, plantation boards)
- District-level application pilots
- Clear mandates: solve local problems, not just publish papers
- It must integrate Public–Private and Civil Society Partnerships, and encourage co-funding models with:
- Exporters of seafood/spices
- Health-tech startups
- Cooperatives (e.g., Kudumbashree)

It should then design R&D feedback loops via panchayats, farmer cooperatives, or health workers so that research becomes grounded and user-facing. Like NZ, it must track impact beyond publications, with an impact accounting framework, reporting outcomes and not just outputs, for example:

- “How many coastal farmers benefited from our salt-tolerant rice?”
- “Did our fish spoilage sensor reduce waste by 20%?”
- “How many ayurvedic products reached clinical pilot stage?”

Kerala must set a target of 1,500–2,000 full-time equivalent researchers per million population, meaning, about 50,000-70,000 FTERs. My estimate is that this is 6x the prevailing situation.

Country	Composite Ratio
India	24.8
China	16.4
Israel	7.55
USA	7.26
Germany	5.75
South Korea	5.3

Table 1. The Composite Ratio, (GERD/GDP)/(FTER/Population) for some prominent actors in global R&D.

5. Is Kerala ready?

It already has an institutional base, with existing universities and CSIR and ICAR laboratories. It has a well-educated population (35M with high HDI), strong agri-health-tourism sectors, a history of decentralized planning, and a healthy co-ops sector.

Kerala must set a target of 1,500–2,000 full-time equivalent researchers per million population, meaning, about 50,000-70,000 FTERs. My estimate is that this is 6x the prevailing situation. The GERD/GDP ratio will then automatically follow, by assuming a target composite ratio of say 5. All this is doable.

Prof. Gangan Prathap is a Scholar at Large, Kerala State Higher Education Council, Thiruvananthapuram, Kerala, India 695033. e-mail: gangan_prathap@hotmail.com

Sector	Why It Matters	Sample Research Focus
Fisheries & Marine	Long coastline, livelihoods	Aquaculture, marine biotechnology
Agroforestry & Spices	Core exports: pepper, cardamom, coffee	Disease-resistant crops, value addition
Public Health	Ageing population, lifestyle diseases	Community health models, herbal medicine
Climate Resilience	Floods, coastal erosion, salinity issues	Flood prediction, salt-tolerant varieties
Tourism & Culture	High employment and income impact	Eco-tourism innovation, cultural tech

Table 2. Areas in which Kerala can concentrate R&D resources

UNESCO GEM Report 2025

Transforming Higher Education in a Changing World

The UNESCO Global Education Monitoring (GEM) Report 2025 named as “Higher Education in a Changing World”, is a landmark study offering a comprehensive analysis of global higher education trends. Published annually by UNESCO, the GEM report serves as a critical resource for policymakers, academics, and international organizations, providing evidence-based insights on enrollment, equity, quality, and the evolving role of universities in society. It emphasizes the transformative potential of higher education in the context of rapid technological change, digital learning innovations, and global mobility, while highlighting persistent challenges in access, funding, and inclusion.

Global Overview

The 2025 GEM Report identifies several key global trends reshaping higher education. First, enrollment continues to grow worldwide, driven by population expansion in developing regions and rising demand for knowledge-based skills. By 2025, global higher education enrollment is projected to exceed 260 million students, with the fastest growth occurring in Asia and Sub-Saharan Africa. However, access remains uneven; low-income countries still struggle to provide opportunities for marginalized groups, particularly women and rural populations.

Second, digital transformation is accelerating. The report highlights how artificial intelligence, online learning platforms, and hybrid educational models are redefining teaching, research, and administrative processes. These technologies have enhanced flexibility and accessibility but also underscore the digital divide, particularly in resource-constrained countries.

Third, international student mobility is shifting. Traditionally, North America and Europe were the dominant destinations for international students, but the report notes a growing trend toward Asian countries, including India, China, and Singapore. This reflects both the expanding capacity of universities in these regions and their strategic efforts to attract foreign talent.

Key Global Findings

- Global higher education enrollment grew by approximately 5% annually over the past decade.
- Digital and hybrid learning models are being adopted by 65% of higher education institutions worldwide.
- Gender parity has improved globally, but women remain underrepresented in STEM and leadership positions.
- International student mobility increased by 12% compared to 2020, with Asia emerging as a major hub.

Report says that the quality and equity are uneven, especially in rural areas and among marginalized populations. Faculty shortages, infrastructure gaps, and limited research output in certain universities continue to constrain India's global competitiveness

India-Specific Insights (Brief)

India's higher education sector is rapidly expanding, with over 45 million students enrolled, driven by initiatives like the National Education Policy (NEP) 2020. Growth is notable in STEM, vocational programs, and digital learning, supporting the country's technological and economic priorities.

Challenges remain, including uneven quality and access, especially in rural areas, faculty shortages, and limited research output. India is emerging as both a source and destination for international students, attracting learners from neighboring countries and Africa due to affordable, high-quality programs.

The report emphasizes India's potential to foster innovation, economic growth, and social inclusion, highlighting the need for investments in digital infrastructure, faculty development, and equitable access. ■■■■■

The Rise and Fall of the **UGC-CARE List**

From promise to controversy: how UGC's CARE List sought to safeguard Indian academia yet collapsed under flaws, criticism, and reform

The University Grants Commission (UGC) has long played a pivotal role in shaping the standards of higher education in India. One of its more ambitious initiatives was the UGC-CARE List, introduced to safeguard academic publishing from the growing menace of predatory journals. While the list began with promise, structural flaws eventually led to its discontinuation, marking the end of an important but troubled chapter in India's academic policy.

Origins and Purpose

The UGC-CARE initiative was conceived in 2018, at a time when predatory journals were flooding the academic landscape. A study had revealed that nearly nine out of ten journals in the older UGC-approved list were potentially unethical, lacking peer review or transparent editorial practices. To restore credibility, the UGC launched the CARE List on June 14, 2019, in collaboration with the Consortium for Academic and Research Ethics.



The UGC-CARE List (2019–2025) sought to curb predatory journals but faced opacity, bias, and criticism. Discontinued in 2025, responsibility now shifts to universities, balancing academic autonomy with integrity risks

Discontinuation

After years of controversy, an expert committee was set up to review the CARE framework. Based on its recommendations, the UGC in its 584th meeting on October 3, 2024, resolved to discontinue the list altogether. The official discontinuation was announced on February 11, 2025.

Instead of maintaining a centralized registry, the UGC issued suggestive evaluation parameters for Higher Education Institutions (HEIs). These include guidelines on ethical publishing, transparent peer review, impact assessments, and safeguards against AI-generated or manipulated content. Responsibility for journal selection and validation now rests with individual universities and research institutions.

Implications

The discontinuation of the CARE List reflects a shift from central control to decentralized academic autonomy. While this empowers institutions to frame their own publication standards, it also places a heavier burden on them to ensure transparency and integrity. Without strong institutional frameworks, the risk of predatory publishing could persist.

The UGC-CARE List began as a bold attempt to reform academic publishing in India. Its demise underscores the complexities of regulating research in a rapidly expanding higher education system. Going forward, the challenge lies in balancing autonomy with accountability—ensuring that Indian scholarship retains both global relevance and ethical credibility.

The CARE List was divided into two groups:

- Group I contained journals vetted by UGC protocols, which included checks on peer review and publication ethics.
- Group II automatically included journals indexed in international databases like Scopus and Web of Science.

The intent was to provide a trusted reference point for researchers, faculty, and institutions in evaluating scholarly publications.

Problems and Criticism

Despite its noble goals, the CARE List faced a series of setbacks. Frequent updates meant that journals were sometimes removed after scholars had already published in them, putting academic careers at risk. Many researchers criticized the process as opaque, with little clarity on why certain journals were excluded.

Allegations also surfaced regarding biases and corrupt practices, with accusations that some legitimate journals—particularly those published in Indian languages—were unfairly sidelined. This eroded confidence in the list's reliability and fairness, undermining the very trust it was meant to build.



Landmark law allows payouts to 'zombie universities'

South Korea moves to shut down 'zombie universities,' granting new powers to close financially struggling private institutions amid falling student numbers

Yumi Jeung

South Korea's National Assembly last month passed the long-delayed Private University Structural Improvement Support Act, ending 15 years of parliamentary stalemate to allow the government to shut down so-called 'zombie universities' that have faced financial difficulties for years, in part due to the country's declining population.

The law passed on 23 July grants the government new powers to order compulsory closure of financially distressed private universities and, controversially, to pay their founding bodies up to 15% of any remaining assets as a "dissolution settlement fee".

Private universities in South Korea receive substantial government funding, and their remaining assets are normally returned to the state on closure. The new legislation, which comes into force in July 2026, stipulates that even if a university shuts down due to financial difficulties, its founding corporation will be able to retain up to 15% of what remains after liquidation.

Private universities in South Korea receive substantial government funding, and their remaining assets are normally returned to the state on closure.

Specific criteria and procedures for calculating the settlement fee will be set out in lower-level regulations. The legislation also provides for compensation for faculty and students affected by closures. However, it does not include any provisions for the re-employment of faculty, which some had pushed for.

A representative of a regional university said: “This law offers a realistic exit strategy for local private universities facing cumulative financial pressures from declining enrolment and frozen tuition fees. It could also encourage smaller regional universities to restructure voluntarily.”

However, a representative from a university foundation affiliated with the Council of Junior College Corporations, a group of private institutions, commented: “We understand the intention, but it’s disappointing that the process lacked proper consultation. From the dissolution settlement to compensation for students and staff, the position of university foundations does not seem to have been fully reflected.

“Closing universities that face serious financial difficulties may be necessary, but every foundation’s situation is different. I wonder whether such differences were truly taken into account.”

Although this is the first time such a bill has cleared the plenary session, similar proposals were repeatedly tabled from 2010 onwards. Four previous attempts failed, mainly due to fierce disagreements over whether founding bodies should be entitled to a payout.

Universities outside the capital, Seoul, and its surrounding areas are also more likely to be affected by falling student numbers. Many of them have been in dire financial straits for years, dubbed by the media as ‘Zombie universities’, but were spared drastic action by the government, concerned by the economic impact of closures on areas outside the Seoul region.



Critics argued mismanagement has dogged many private university foundations – in some cases marred by corruption – and for the government to ‘reward’ institutions responsible for their own financial collapse would be inappropriate.

Universities outside the capital, Seoul, and its surrounding areas are also more likely to be affected by falling student numbers. Many of them have been in dire financial straits for years, dubbed by the media as ‘Zombie universities’, but were spared drastic action by the government, concerned by the economic impact of closures on areas outside the Seoul region.



According to Statistics Korea, the number of 18-year-olds fell from 660,000 in 2015 to 430,000 in 2024, a drop of nearly 30%. By contrast, university admission quotas only declined 10% over the same period, from 750,000 to 680,000.

Bipartisan consensus

However, the current National Assembly saw an unusual degree of bipartisan consensus. Lawmakers from both the ruling Democratic Party and the opposition People Power Party submitted similar versions of the proposed reforms.

An official on the parliamentary Education Committee explained: “In the past, there was a strong public perception that allowing failing university foundations to keep part of their assets, despite being responsible for poor management, was unjust – especially given the number of corruption cases. But during the subcommittee stage, consensus on the dissolution fee was reached smoothly.”

The official noted: “The sharp drop in the school-age population was a strong motivator. We also reached agreement on measures such as compensation for staff and students. The details will be set in subordinate regulations, but that’s all we can say for now.”

The urgency is clear. South Korea’s pool of 18-year-olds – the standard age for university entry – has been shrinking faster than universities have reduced intake.

According to Statistics Korea, the number of 18-year-olds fell from 660,000 in 2015 to 430,000 in 2024, a drop of nearly 30%. By contrast, university admission quotas only declined 10% over the same period, from 750,000 to 680,000.

The National Assembly Futures Institute, a parliamentary think tank, predicted that by 2040, the 18-year-old population will plunge to 280,000 – 40% below 2024 levels.

According to Statistics Korea, the number of 18-year-olds fell from 660,000 in 2015 to 430,000 in 2024, a drop of nearly 30%. By contrast, university admission quotas only declined 10% over the same period, from 750,000 to 680,000. The National Assembly Futures Institute, a parliamentary think tank, predicted that by 2040, the 18-year-old population will plunge to 280,000 – 40% below 2024 levels.

Despite receiving roughly KRW600 billion (US\$440 million) in government funds over the past decade, these universities failed to return to financial health. Sustained operating losses, wage arrears exceeding two months, or failure to submit annual accounts can lead to them being characterised as ‘insolvent’.

However, the Korea Higher Education Institute issued a sharply critical statement on 24 July, arguing that the scale and speed of demographic decline meant that “simply eliminating financially weak universities” would not solve the wider crisis in higher education.

Instead, it called for a “comprehensive master plan” for restructuring the entire sector, including the introduction of “government-responsible private universities”, which would come under close government supervision backed by increased state funding. This would strengthen “public accountability, transparency and democratic governance”.

The institute also urged policymakers to consider redistributing reduced student numbers in line with revised admission quotas and educational capacity, as well as expanding universities’ lifelong learning roles.

*This article was first published in **University World News (UWN)***

Access the original article:

<https://www.universityworldnews.com/post.php?story=20250815125600612>

**ENSURE YOUR
PARTICIPATION**

Kerala Institutional Ranking Framework (KIRF)

Incubating Institutional Excellence

- The Kerala-specific ranking index, termed as Kerala Institutional Ranking Framework (KIRF) for universities and colleges on the lines of the NIRF
- Enabling the holistic and comprehensive ranking of the 1500+ higher education institutions in the state.
- Pioneering step in the country in quality assurance in Higher Education.



The Kerala State Higher Education Council

Email: kirfadmin@kshec.org

Visit: www.kirf.kshec.org



Bridging the Gender Gap: Women's Growing Role in STEM and Scientific Research in Kerala

Exploring Kerala's women scientists, their achievements, challenges, and initiatives promoting greater participation and leadership in STEM fields nationwide

T.S. Preetha

Women's participation in scientific research and related fields in India, especially in Kerala, has steadily increased in the postindependence period. In Kerala, there are pioneering women scientists who have made significant contributions in their field of research. Dr. E. K. Janaki Ammal, the first woman Doctorate in Botany in India is credited with remarkable contributions to plant cytogenetics and taxonomy. Another prominent example is Dr. Tessy Thomas, the "Missile Woman of India" and former Project Director for the Agni-IV missile, also hails from Kerala. Even though Kerala has higher literacy rates than all other states in India, the representation of women in scientific sectors remains very low.



In Kerala, there are many opportunities like research fellowships, awareness programmes, and the development of databases to track and increase the participation of women in science, technology, engineering, agriculture, and medicine (STEAM) fields. Government initiatives like the Women Scientist Scheme (WOS) and WISE-KIRAN programmes provide financial and structural support to women researchers, including those re-entering their careers after gaps. Kerala State Council for Science, Technology and Environment's (KSCSTE) programmes like the "Back-to-Lab" research fellowship, support women to return back to research after a career break. The Women Scientists Division (WSD) in KSCSTE is providing the framework for coordinating and implementing programmes to increase women's participation in STEAM fields. Besides, the CURIE program of the Department of Science and Technology (DST) aims to train and create world-class women scientists. In addition, State Higher Research Centres of Excellence in Science, Technology and Applications (SHRESTA) programme boosts the collaborations between research centres and institutions to foster inter/multi-disciplinary research and innovation, which is an integral part in contemporary research.

Many women in the rural segments of Kerala are engaged in traditional skills like handicrafts. There are schemes from the government side to expand their technological skills and market linkages. In the socio-economic sector, poverty eradication and women empowerment program well established in Kerala named 'Kudumbasree' focuses on empowering tribal women through community-based ecotourism initiatives and promote sustainable development. Research studies have been conducted by the Kerala Women's Commission on various aspects of women's lives, their problems in education and employment. Awareness programmes such as "Technological advances in transforming women's lives" aim to educate women about the potential of science and technology advancements.

In the socio-economic sector, poverty eradication and women empowerment program well established in Kerala named 'Kudumbasree' focuses on empowering tribal women through community-based ecotourism initiatives and promote sustainable development.



In addition, according to the information from India STEM Foundation, women in STEM roles often face challenges like work-life imbalance, gender-based discrimination, and limited access to mentorship and funding opportunities.



International Day of Women and Girls in Science, which is celebrated annually on February 11th, aims to raise awareness about the importance of women's contributions to science and encourage their participation in STEM fields. The initiative of Women in Science (WiS) panel under the guidance of Prof T Rohini Godbole has compiled biographical sketches of 100 women in STEM in Lilavati's Daughters: The Women Scientists of India. In India, even though women participation has increased, they don't get enough recognitions in research and leadership positions in STEM areas. Studies are indicating that there is an attrition of women from STEM education and careers due to societal expectations, workplace biases and lack of support systems like mentorship. Apart from these, there are health and nutrition challenges that vary across different life stages, with concerns related to early menarche and menopause.

In the view of India Today, gender-specific challenges, financial constraints and societal pressures, excessively affect girls' participation in STEM. In addition, according to the information from India STEM Foundation, women in STEM roles often face challenges like work-life imbalance, gender-based discrimination, and limited access to mentorship and funding opportunities. Kerala State Planning Board says, while education enrollment at primary levels shows gender equality, engineering and polytechnic fields still witness lower female participation compared to boys.



According to the UNESCO reports, women make up 30% of researchers worldwide, highlighting the ongoing gender gap in science. Initiatives like the Gender Advancement for Transforming Institutions (GATI) program aim to address these disparities and promote gender equality in STEMM (Science, Technology, Engineering, Mathematics, and Medicine) institutions. However, India has witnessed an inspiring rise in women who have broken barriers and made significant contributions to STEM fields.

Apart from the majestic contributions of Indian women like Tessie Thomas, Kalpana Chawla and Sunita Williams in the world of space exploration, Ritu Karidhal and Muthaya Vanitha played crucial roles in India's prestigious Chandrayaan and Mangalyaan missions. Their leadership and expertise have elevated our country as a mainstream force in space technology. Interestingly, the innovative research in vaccines and public health by Gagandeep Kang, a renowned virologist and the first Indian woman elected as a Fellow of the Royal Society in London has contributed significantly to global immunization efforts, to fight against infectious diseases in children.

Dr. Aditi Pant, an oceanographer and one of the first Indian women to participate in an Antarctic expedition, has contributed immensely to climate science and marine research and this has provided valuable insights into environmental changes and their impact on ecosystems. These women, along with many others, have demonstrated that gender is not at all a limitation in STEM.

According to the UNESCO reports, women make up 30% of researchers worldwide, highlighting the ongoing gender gap in science.

Enhancing the visibility of women's contributions and creating supportive environments are crucial for encouraging women to pursue and succeed in scientific careers. Women participation is vital for economic growth, gender equality, and ensuring scientific solutions are relevant in the progress of a country. McKinsey estimates that eliciting women's workforce participation can increase India's GDP by \$700 billion by 2025. So, we must transform our education systems, workplaces and social structures to ensure the entry and thriving of women into STEM fields. It is to be remembered always that Kerala have only very few role models to point out in STEM work places. Let us hope more efforts to bridge the gap and promote inclusivity by providing scholarships, mentorship, career guidance, and fostering community action to challenge gender norms in STEM will surely inspire future generations and will enhance much more participations and contributions in STEM from women side.



Dr. T. S. PREETHA
Professor, Department of Botany
University College, Thiruvananthapuram
Email: preethahemanth@yahoo.com
(Author is recipient of Kairali Gaveshana Puraskaram)



Transformation of Academic Writing in the Age of Artificial Intelligence

Jijo P. Ulahannan

Exploring how generative AI is reshaping student writing, challenging assessment norms, and redefining the purpose of academic literacy

The advent of artificial intelligence (AI), particularly generative models like ChatGPT, Claude, and Gemini, has fundamentally reshaped the landscape of college-level writing and academic research. What was once a labour-intensive process grounded in critical thinking, personal voice, and iterative drafting is increasingly being outsourced to algorithms capable of producing coherent, grammatically sound, and contextually plausible text in seconds. This transformation is not merely technological - it is pedagogical, ethical, and epistemological, challenging the very foundations of how knowledge is produced, assessed, and valued in higher education.

At the heart of this shift is the erosion of the traditional research paper and essay as reliable indicators of student learning. For decades, the college writing assignment served as a cornerstone of liberal education, designed to cultivate analytical reasoning, argumentation, and original thought. However, AI tools now enable students to generate full-length essays from minimal prompts, summarise complex readings, and even draft research proposals without engaging directly with source material. As one New York University student admitted, he used AI to write his college application and complete coursework in subjects he had no intention of mastering - achieving high grades while retaining virtually no knowledge.

This widespread use of AI in academic writing has rendered conventional assessment methods increasingly obsolete. Time-stamped documents, plagiarism detectors, and take-home assignments are no longer sufficient safeguards. AI detection tools such as GPTZero and Originality.ai have proven unreliable, often producing false positives or failing to identify machine-generated text altogether. In response, many institutions are abandoning surveillance-based approaches and instead embracing a new reality: AI is not a disruptor to be resisted, but an integrated component of the educational ecosystem.

The implications for research writing are equally profound. Undergraduate and graduate students alike are using AI to assist with literature reviews, data interpretation, and manuscript drafting. While such tools can enhance efficiency - generating hypotheses, organizing citations, or improving clarity - they also risk undermining the intellectual rigour inherent in scholarly inquiry. When AI produces a literature review, for instance, it synthesises existing knowledge without critical engagement, potentially reinforcing biases present in training data or generating plausible but inaccurate "hallucinations." The result is a growing disconnect between output and understanding, where students may submit polished work that reflects neither deep comprehension nor authentic inquiry.

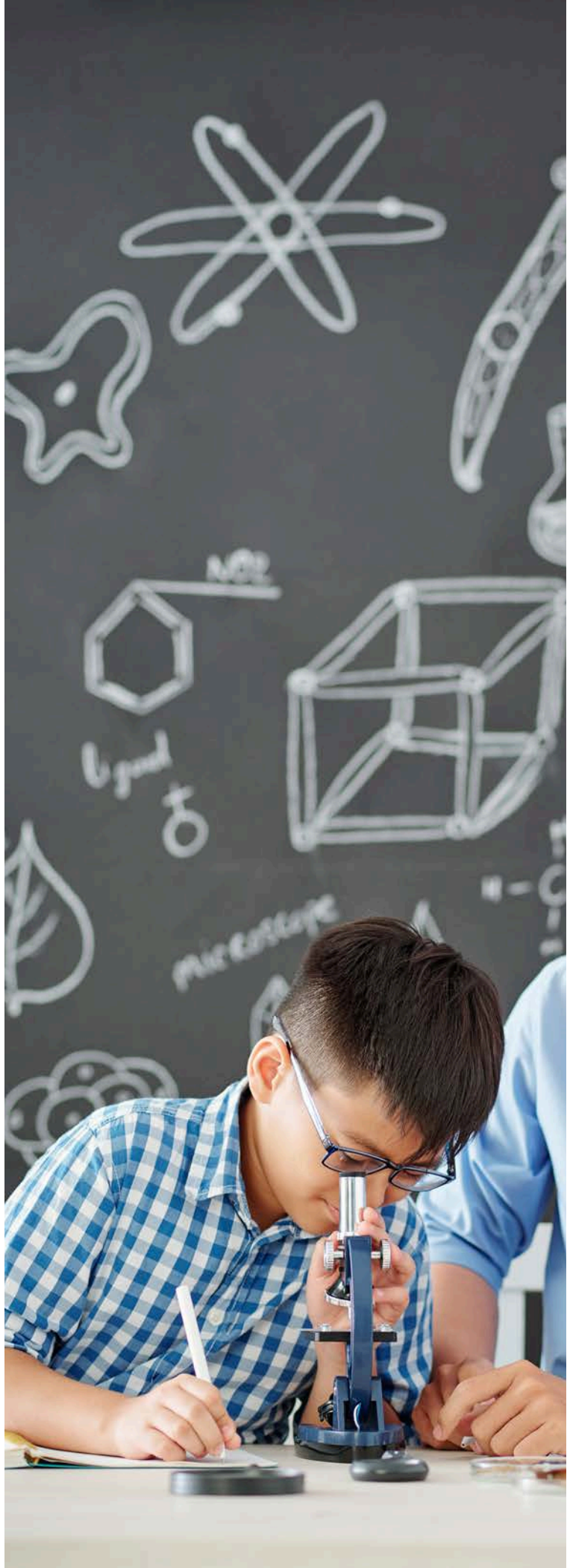
In response, some educators are redefining the purpose of writing in academia. Rather than focusing solely on the final product, they emphasize process: drafting, peer review, revision, and reflective practice. Dan Melzer, director of first-year composition at UC Davis, argues that the problem lies not with AI, but with how writing has been taught - particularly the overreliance on formulaic structures like the five-paragraph essay, which prioritize compliance over creativity. By fostering a collaborative writing environment where AI serves as a dialogue partner rather than a substitute, educators can preserve the cognitive benefits of writing while adapting to new technological realities.

Others have returned to analog methods to ensure authenticity. In-class blue-book exams, handwritten analyses, and oral assessments are experiencing a resurgence. Professors report that requiring students to write by hand - such as analysing the opening of Ralph Ellison's *Invisible Man* in a timed setting - not only verifies authorship but also activates deeper cognitive processing. Neuroscientific research supports this: handwriting engages motor and memory systems in ways that typing does not, reinforcing comprehension and retention.

Beyond the classroom, the integration of AI into institutional infrastructure signals a broader transformation. OpenAI's launch of ChatGPT Edu, adopted by universities including Arizona State and the University of Pennsylvania's Wharton School, marks a shift toward AI-as-infrastructure, embedding generative tools into tutoring, advising, and course design. Similarly, the California State University system has partnered with OpenAI to provide access to ChatGPT Edu for over 4,60,000 students, signaling a formal endorsement of AI as a legitimate academic resource.

Yet this integration raises pressing ethical and philosophical questions. If AI can produce competent writing, what distinguishes human scholarship? What value do originality, voice, and intellectual struggle hold in an era of instant content generation? Moreover, as AI systems are trained on a vast corpus of human-generated text - including student papers - there is growing concern about data ownership and exploitation. Institutions may soon face dilemmas over whether student writing, once considered private academic work, becomes a commodity for training commercial AI models.

OpenAI's launch of ChatGPT Edu, adopted by universities including Arizona State and the University of Pennsylvania's Wharton School, marks a shift toward AI-as-infrastructure, embedding generative tools into tutoring, advising, and course design.





The long-term impact of AI on education may ultimately depend on how institutions choose to respond. A 2023 Harvard study found that students using an AI tutor in a physics course outperformed peers taught by human instructors, suggesting that AI can enhance learning when used strategically. However, experiments like that of philosopher Barry Lam - who gave students a PhD-level exam after allowing AI-assisted coursework - reveal a troubling gap: while AI accelerates output, it does not necessarily deepen understanding. His students “failed miserably,” underscoring the risk of mistaking fluency for mastery.

In conclusion, AI is not destroying college writing assignments - but it is forcing a necessary reckoning. The traditional research paper may no longer be a viable measure of learning, but this crisis presents an opportunity to reimagine academic writing as a process of authentic inquiry, critical reflection, and human engagement. Rather than resist AI, educators must redefine the goals of writing in higher education: not to produce perfect prose, but to develop students' capacity for navigating complexity, uncertainty, and ethical ambiguity—qualities no machine can replicate.

The long-term impact of AI on education may ultimately depend on how institutions choose to respond. A 2023 Harvard study found that students using an AI tutor in a physics course outperformed peers taught by human instructors, suggesting that AI can enhance learning when used strategically

1. Hsu, H. (2025, June 30). What happens after A.I. destroys college writing? The New Yorker.
2. Sidoti, O. (2025, January 15). About a quarter of U.S. teens have used ChatGPT for schoolwork – double the share in 2023. Pew Research Center.
3. California State University. (2024). CSU launches an AI initiative with OpenAI for 460,000 students.
4. Organisation for Economic Co-operation and Development (OECD). (2023). Survey of adult skills (PIAAC): Trends in literacy and numeracy.
5. Harvard Graduate School of Education. (2023). AI tutors in STEM education: A pilot study in physics instruction.
6. Anthropic. (2024). Understanding student use of AI: Insights from 1 million conversations with Claude.
7. Federal Reserve Bank of New York (2024). Labor market outcomes for recent college graduates.
8. Melzer, D. (2023). Writing across the curriculum: Rethinking composition in the age of AI. University of California, Davis.
9. Lam, B. (2024). Teaching philosophy in the age of AI: Experiments with ChatGPT in the classroom Podcast & blog post. Hi-Phi Nation.



Dr. Jijo P. Ulahannan,
Professor, Department of Physics,
Government College Kasaragod,
Kannur University.
Email: jijo@gck.ac.in

Institutional Development Plans (IDPs) for Higher Education Institutions

Each higher education institution should create an Institutional Development Plan reflecting its vision, resources, and context, aligned with national and state educational priorities

Introduction

The University Grants Commission (UGC) in 2024 introduced Guidelines for Institutional Development Plans (IDPs) to strengthen Higher Education Institutions (HEIs) across India. An IDP is envisioned as a comprehensive, integrated, and holistic roadmap tailored to each institution's vision, mission, context, and resources.

The IDP seeks to blend institutional priorities with national and state educational policies, development frameworks, and global standards, while remaining flexible enough to address local needs. Its ultimate aim is to guide institutions toward excellence in academics, research, governance, and social responsibility



Core Principles

- Support learner-centric teaching, creativity, and innovation.
- Encourage multidisciplinary integration across sciences, arts, humanities, vocational studies, and sports.
- Embed vocational training, skilling, and entrepreneurship into higher education for employability and lifelong learning.
- Balance institutional autonomy with accountability, promoting good governance and transparency.
- Emphasize participation and inclusivity, bridging trust gaps among stakeholders and encouraging collaboration.
- Build research and innovation ecosystems, supporting start-ups and industry linkages.
- Enable future-readiness with a 15-year vision that integrates digital transformation, sustainability, and global competitiveness.
- Align internal growth with external quality assurance and accreditation systems for credibility and continuous improvement.

An IDP provides a structured roadmap enabling institutions to achieve academic excellence, social responsibility, innovation, and long-term sustainability

IDP for a Knowledge-Driven Economy

The IDP framework positions HEIs as key drivers in India's and Kerala's transition to a knowledge-based economy. It empowers institutions to:

- Enhance research excellence, innovation, and interdisciplinary learning.
- Strengthen skill development, employability, and industry partnerships.
- Advance digital transformation for wider access and improved pedagogy.
- Promote internationalization, collaborations, and global presence.
- Act as socio-economic catalysts, contributing to inclusive development and community engagement.

Process of Preparing an IDP

1. Define Vision and Mission: Establish a clear institutional vision aligned with national and state priorities, while reflecting the institution's unique identity.
2. Assess Needs: Undertake a consultative assessment of strengths, weaknesses, opportunities, and challenges (SWOC analysis).
3. Identify Gaps: Map capacity gaps in human, financial, and infrastructural resources.
4. Formulate Annual Activity Plans: Prepare structured action plans with clear initiatives, timelines, and responsibilities.
5. Ensure Transparent Systems: Use technology-enabled, inclusive systems for academic, administrative, and financial efficiency.
6. Foster Lifelong Learning: Integrate skilling, vocational education, and entrepreneurship opportunities.
7. Engage Stakeholders: Involve faculty, students, alumni, industry, and the community in planning and execution.
8. Set Measurable Goals: Define indicators and time-bound targets to monitor institutional performance.
9. Review and Update: Conduct periodic reviews to ensure adaptability and continuous improvement.
10. Plan for Long-Term Sustainability: Focus on financial sustainability, future-ready curricula, and innovation-driven growth.

Conclusion

Institutional Development Plans are dynamic and evolving tools. They integrate institutional aspirations with national and state educational policies, ensuring holistic growth and long-term sustainability.

By adopting well-structured IDPs, Higher Education Institutions in Kerala and across India can:

- Enhance academic and research capacities.
- Strengthen social responsibility and equity.
- Build resilience, global competitiveness, and future readiness.

Ultimately, IDPs are not just planning documents but strategic frameworks for excellence, inclusivity, and innovation in higher education.

HOW TO PREPARE IDP

Stages for the preparation of the Institutional Development Plan (IDP) based on the provided UGC guidelines:

1. Define Vision and Mission:

Begin by clearly defining the institution's vision and mission. This should align with national educational policies, such as the National Education Policy (NEP) 2020, and reflect the institution's unique identity and aspirations. Establishing a strong foundational vision is crucial for guiding all subsequent planning efforts.

2. Assessment of Institutional Needs: Conduct a comprehensive assessment of the institution's current status, identifying developmental needs through wide consultative processes. This involves evaluating the institution's strengths, weaknesses, opportunities, and challenges (SWOC analysis) to understand its context better.

3. Identifying Gaps: Based on the assessment, identify capacity gaps in terms of human resources, infrastructure, and financial resources. Understanding these gaps is essential for developing targeted strategies that will enable the institution to meet its defined goals.

4. Developing Annual Activity Plans: Formulate annual activity or capacity-building plans to address the identified gaps. This stage includes outlining specific initiatives, timelines, and responsible parties to ensure systematic progress toward institutional goals.

5. Establishing Transparent Systems: Create transparent and inclusive systems for growth and development. This involves incorporating relevant tools and technologies, especially digital solutions, to optimize resources and ensure holistic development across all institutional dimensions.

6. Promoting Lifelong Learning:

Foster an ethos of lifelong learning within the institution. Integrate skill development and vocational training into the higher education framework to enhance employability and entrepreneurship among students.

7. Stakeholder Engagement:

Ensure meaningful engagement of all stakeholders, including faculty, students, alumni, and industry partners, in the development and implementation of the IDP. This collaborative approach helps to align various interests and gather diverse insights for the plan.

8. Setting Measurable Goals:

Quantify the institution's goals using indicators and time-bound targets. This stage involves establishing clear metrics for evaluating progress and success in implementing the IDP.

9. Periodic Reviews:

Implement a system for periodic reviews to assess the effectiveness of the IDP. This includes making necessary adjustments based on feedback and evolving institutional needs, ensuring continuous improvement and adaptation over time.

10. Focus on Long-Term Sustainability and Growth

Develop a 15-year vision that keeps the institution future-ready, anticipating advancements in technology, shifts in industry needs, and evolving educational standards.

Ensure financial sustainability through diversified revenue streams, efficient budgeting, and cost controls.



Call to Action

Calling All Creatives!

We invite you to share your unique ideas, compelling stories, and campus experiences. Submit your articles, grievances, and quality photos to be featured in our next issue!

Your Voice Matters!

This is your chance to contribute to our magazine and make a difference. Send us your thoughts, projects, and snapshots that showcase the true essence of our campus life.

Be Heard, Be Seen!

We're looking for passionate writers and photographers to spotlight their perspectives and creativity. Submit your work and let your voice echo across the campus!

Join the Conversation!

Share your stories, concerns, and beautiful images of our campus. Let's create a vibrant and inclusive magazine together.

Express Yourself!

Whether it's an insightful article, a heartfelt grievance, or a stunning photo, we want to hear from you. Contribute to our campus magazine and make your mark!

share to us:

contact.hematters@gmail.com



Kerala Knowledge Consortium (KKC) Centres

Building a collaborative, community-responsive research network linking academia, industry, and society to shape Kerala's future as a global knowledge hub

Sudheendran K

The Kerala Knowledge Consortium (KKC) is a pioneering initiative of the department of higher education launched in the current academic year under the Centres of Excellence programme of the Kerala State Higher Education Council (KSHEC). Conceived as part of Kerala's broader vision for higher education reform, the mission of KKC is to build a people-centered knowledge society by fostering meaningful partnerships between higher education institutions, local self-governing bodies, industries, NGOs, and other stakeholders.

The consortium is designed to bridge the persistent gap between academic research, industrial requirements, local community challenges, and broader social development, thereby positioning Kerala's higher education ecosystem as both locally responsive and globally relevant.

Colleges and universities across Kerala now have the opportunity to establish KKC Centers in specific areas of knowledge, in close collaboration with KSHEC. Interested institutions may approach KSHEC with detailed proposals that outline the thematic focus, objectives, and scope of the proposed center. Proposals that emphasize interdisciplinary collaboration, cross-institutional partnerships, and active community engagement will be prioritized, as these elements are central to the spirit of the consortium. Once established, these centers will function as knowledge hubs that generate innovative solutions, nurture applied research, and contribute to both the immediate needs of their chosen domain and the developmental aspirations of the state as a whole.

Interested institutions may approach KSHEC with detailed proposals that outline the thematic focus, objectives, and scope of the proposed center. Proposals that emphasize interdisciplinary collaboration, cross-institutional partnerships, and active community engagement will be prioritized

The design of KKC Centers draws inspiration from successful models in leading national and international institutions. At one level, they can bring together academics, industry experts, and companies to form research groups dedicated to specialized domains, focusing on applied research, knowledge dissemination, and policy influence, while also mobilizing resources through strong partnerships with industry and government. This model has proven highly effective in creating an academia-industry collaborative framework that aligns research outcomes with practical needs and societal development. At another level, KKC Centers can be organized around major technology clusters, functioning with institutional autonomy to define their research priorities, forge cross-border collaborations, and pursue cutting-edge inquiry in frontier areas such as artificial intelligence, sustainable energy, advanced materials, and healthcare innovation.



The Kerala Knowledge Consortium therefore proposes a hybrid strategy that combines the strengths of localized, community-responsive knowledge centers with the ambition to reach international research standards. By bringing together higher education institutions, industries, and communities in dynamic collaboration, while at the same time clustering centers around globally significant knowledge domains, the KKC is envisioned as a transformative network of excellence across Kerala. For colleges and universities, this initiative represents not only an opportunity to strengthen their academic and research profile but also a chance to play a decisive role in shaping Kerala's future as a vibrant knowledge society.



Dr Sudheendran K
Research Officer on Special Duty
Kerala State Higher Education Reforms
Implementation Cell, KSHEC &
(Associate Professor, Dept. of Physics
Sree Kerala Varma College, Thrissur-II)
Email: sudhi.kooriyattil@gmail.com



**APPLY
NOW**

SAAC

















Kerala State Higher Education Council

State Assessment & Accreditation Centre

Ensuring Quality Standards
Through Continuous Evaluation
of State HEIs

First State in the country to establish a
state-level accreditation center similar
to NAAC for assessing and grading HE
institutions with state specific criteria

**Open Doors to New Opportunities -
Apply for Accreditation Now
and Enhance Your Institution's Excellence!**
<https://kshhec.org/saac.php>

- ✓   Preparatory Framework for NAAC & NIRF
- ✓   Implementation of PATH, Mentor-Mentee initiatives, and Institutional
- ✓   Development Plans (IDP) Programmes in HEIs
- ✓   Customized Institutional Development Plans (IDPs)
- ✓   Enhanced Institutional Quality and Visibility
- ✓   Establishing State-Level Quality Assurance Bodies
- ✓   Focused Assessment for Self-Financing Institutions
- ✓   Inclusion of State-Specific Criteria



Outcome Based Education Part-V

Mastering the Cognitive Domain

A comprehensive look at Bloom's cognitive processes and their central role in shaping effective, measurable learning outcomes

The cognitive domain of Bloom's Taxonomy remains the most widely applied framework for designing courses in general education. This predominance stems from the fact that cognitive processes are typically more measurable and objective than those in the affective or psychomotor domains. Learning within the cognitive domain depends largely on the intellectual effort and abilities that learners commit to the process.

In traditional educational models, the emphasis is placed heavily on these intellectual processes. In contrast, practical tasks and collaborative learning experiences often shift the focus toward psychomotor or affective processes. Nevertheless, even in these contexts, cognitive engagement is inherently involved, as learners must process, interpret, and integrate information to achieve the intended outcomes.

Consequently, the cognitive domain exerts a pervasive influence across all forms of learning—whether confined to classroom instruction or embedded in experiential, real-world activities.

Cognitive Processes

Cognitive processes involves a number of intellectual efforts which include attention, perception, comprehension, calculation, judgment, storing in memory, reasoning, retrieval from memory, learning, planning, problem-solving, self-monitoring, and speech formation. Cognitive learning is demonstrated by knowledge recall and intellectual skills: comprehending information, organizing ideas, analyzing and synthesizing data, applying knowledge, choosing among alternatives in problem-solving, and evaluating ideas or actions. This domain on the acquisition and use of knowledge is predominant in the majority of courses.

According to the revised Bloom’s Taxonomy, cognitive processes in learning are categorized into lower-order and higher-order thinking skills.

- The lower-order processes include Remember, Understand, and Apply,
- while the higher-order processes comprise Analyze, Evaluate, and Create

There are several subprocesses associated with each one of these cognitive processes and are basically addressing the four categories of knowledge considered by the Revised Bloom taxonomy, which are: Factual, Conceptual, Procedural, Metacognitive as mentioned in the previous sections.

The cognitive domain of Bloom’s Taxonomy is the most widely applied in education because its processes are more measurable and objective than those in the affective or psychomotor domains



Let us now consider the cognitive processes,

1. Remember

When the objective of instruction is to promote retention of the presented material in much the same form as it was taught, the relevant process category is Remember. Remembering involves retrieving relevant knowledge from long-term memory. The two associative cognitive processes are recognizing and recalling.

To assess student learning in recognizing activity, the student is given recognition or recall-task under conditions very similar to those they learned the material. Little, if any, extension beyond those conditions is expected. If, for example, a student has learned the symbols for different logical functions, then the test of remembering could involve requesting the student to match the logical functions given in one list with symbols shown in a second list. The recall test could include asking the student to provide the symbols for specified logical functions.

Remembering knowledge is essential for meaningful learning and problem solving as the knowledge is used in more complex tasks. When teachers focus on meaningful learning, however, remembering knowledge is integrated within the larger task of constructing new knowledge or solving new problems.

Remember: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers



The relevant knowledge may be factual, conceptual, procedural, or some combination of these. Remembering knowledge is essential for meaningful learning and problem-solving.

Recognizing involves retrieving relevant knowledge from long-term memory to compare it with the presented information. In recognizing, the student searches long-term memory for a piece of information that is identical or very similar to the given information. Three main methods of presenting a recognition task for assessment are verification, matching, and forced-choice.

Recalling (retrieving) involves retrieving relevant knowledge from long-term memory when given a prompt to do so. The prompt is often a question. In recalling, a student searches a long-term memory for a piece of information and brings that piece of information to working memory where it can be processed.

Remembering, therefore, is retrieving relevant knowledge from long-term memory. The relevant knowledge may be factual, conceptual, procedural, or some combination of these. Remembering knowledge is essential for meaningful learning and problem-solving. Some action verbs associated with remembering activity include recognize, recall, list, tell, locate, write, find, mention, state, draw, label, define, name, describe, prove a theorem.

Some sample Remember activities are:

- What percentage of Kerala state income comes from foreign remittances?
- What is the occupational structure of the Kerala population?
- What is confessional poetry?
- Who gave the call, "Swaraj is my birthright, and I shall have it"?

Some generic questions related to Remember activity are:

- What happened after...?
- How many...?
- Who was it that...?
- Can you name the...?
- Describe what happened at...?
- Who spoke to...?
- What is the meaning of...?
- What is...?

2. Understand

Understanding occurs when learners construct meaning from instructional messages presented in various forms—oral, written, or visual. Such messages may be delivered during lectures, through textbooks, in digital media, or via experiential activities like laboratory demonstrations, field observations, role plays, or computer simulations. Learners demonstrate understanding when they connect new information with prior knowledge, with conceptual knowledge forming the foundation for this process.

The “Understand” category in the revised Bloom’s Taxonomy includes the following key cognitive processes:

- Interpret – Translate, paraphrase, represent, or clarify information. This may involve converting between formats, such as words to diagrams or numbers to text.
- Exemplify – Provide specific instances of a general concept, using defining features to illustrate principles.
- Classify – Identify that something belongs to a given category by detecting relevant features or patterns.
- Summarize – Condense information into a concise statement or identify overarching themes.
- Infer – Detect patterns across examples to derive general principles or predict future instances.
- Compare – Identify similarities and differences between objects, events, or ideas, supporting reasoning by analogy.
- Explain – Construct a cause-and-effect model to clarify how parts of a system or sequence influence one another.

These processes enable learners to organize information, recognize patterns, and develop deeper conceptual frameworks. For example, inferring might involve identifying the numerical pattern in the Fibonacci sequence, while comparing could involve relating the Indian Freedom Movement to other decolonization efforts. Explaining might require linking changes in one part of an economic system to impacts elsewhere.

Building connections between new and prior knowledge through interpretation, classification, comparison, and explanation to foster deeper conceptual understanding

Understand: Demonstrate understanding of facts and ideas by organizing, comparing, interpreting, giving descriptions, and stating main ideas.

Sample activities for the “Understand” category include:

- Classifying the characteristics of Phylum Annelida.
- Comparing India’s independence movement with similar struggles in Asia and Africa.
- Explaining agricultural price fluctuations using the Cobweb Theorem.
- Illustrating how marginalized groups are excluded from development benefits.
- Interpreting financial statements using fund flow and cash flow analysis.
- Estimating marginal utility from total utility data.

Generic assessment questions that check for understanding include:

- What was the main idea expressed in...?
- Provide an example of...?
- Write in your own words...
- What differences exist between...?
- What could happen next...?

By engaging in these activities and responding to such questions, learners demonstrate their ability to process, relate, and explain knowledge—skills essential for advancing to higher-order thinking tasks like analysis, evaluation, and creation.



3. Apply

Apply involves using procedures to perform exercises or solve problems. Thus, apply is closely linked with Procedural Knowledge. An exercise is a task for which the student already knows the proper procedure to use, so the student has developed a routinized approach. A problem is when the student initially does not know what procedure to use, so the student must locate a procedure to solve the problem. The apply process consists of two cognitive processes: executing – when the task is an exercise (familiar) – and implementing – when the task is a problem (unfamiliar).

In executing, a student routinely carries out a procedure when confronted with a familiar task (exercise). The familiarity of the situation often provides clues to guide the choice of the appropriate procedure to use. Executing is more frequently associated with the use of skills and algorithms than with the techniques and methods. Skills and algorithms have two qualities that make them particularly amenable to executing. First, they consist of a sequence of steps that are generally followed in a fixed order. Second, when the steps are performed correctly, the result is a predetermined answer. An alternative term for executing is carrying out.

Implementing occurs when a student selects and uses a procedure to perform an unfamiliar task. Because selection is required, the student must possess an understanding of the type of problem encountered as well as the range of procedures that are available. Thus, implementing is used in conjunction with other cognitive process categories, such as Understand and Create. Because the students face an unfamiliar problem, they do not immediately know which of the available procedures to use.

Furthermore, no single procedure may be a “perfect fit” for the problem; some modifications to the procedures may be needed. Implementing is more frequently associated with the use of techniques and methods than with skills and algorithms. Techniques and methods have two qualities that make them particularly amenable to implementation.

Apply: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way

Applying knowledge through execution of familiar tasks and implementation of new procedures to solve problems using skills, techniques, and methods

First, the procedure may be more like a “flow chart” than a fixed sequence; that is, the procedure may have “decision points” built into it. Second, there often is no single, fixed answer that is expected when the procedure is applied correctly. The notion of no single, fixed answer is especially applicable to objectives that call for applying conceptual knowledge such as theories, models, and structures where no procedures have been developed for the application. An alternative term for implementing is using.

Some sample Apply activities are:

- Trace the historical background of American Literature
- Determine the correctness of English pronunciation over a range of recognized International accents.
- Compute the Energies and Wave functions of the Hydrogen atom using the Schrodinger equation.
- Prepare scripts for radio talks, newspaper articles, and television talks on health, nutrition, and family living for tribal, rural, and urban groups.
- Carry out the transcription of the given dialogue
- Compute the trend from financial statements
- Do you know another instance where ...?

References:

- *Taxonomy for Learning, Teaching, and Assessing, A: A Revision of Bloom's Taxonomy of Educational Objectives, Abridged Edition Paperback – 28 August 2001 by Lorin Anderson & David Krathwohl (Author)*
- *Report on Examination reforms in State Universities, June 2021: published by the Kerala State Higher Education Council*
- *Handbook on Outcome Based Education (General Programmes) 2023: by Prof. N.J. Rao: published by the Kerala State Higher Education Council*

Next Issue: Higher Cognitive Process

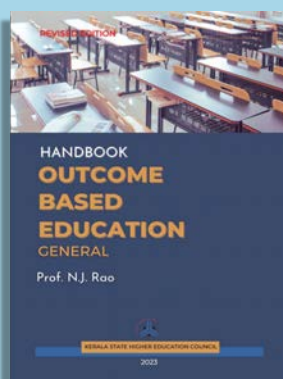


HANDS-ON-TRAINING

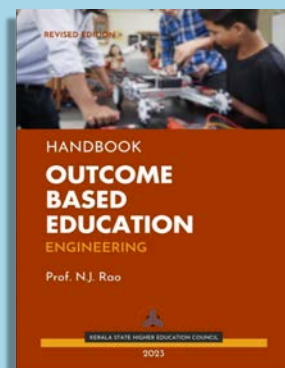
OUTCOME BASED EDUCATION (OBE)

All Higher education Institutions in the country are advised to implement OBE in curriculum design and practice by stating the learning outcomes of programmes and their courses including the Graduate Attributes. A specially designed scheme of OBE by Prof. N.J. Rao is being offered through training/workshops by the Council. It includes, Blooms taxonomy, three-level Outcome scheme, assessment and evaluation methods, attainment of outcomes.

- **Kerala State Higher Education Council organises Training for the Institutions and Faculty**
- **Published Handbook of OBE & Computation of Attainment published for Engineering and General Education programmes etc.**
- **Handbook for Question bank for FYUGP under OBE scheme etc.**



Kerala State Higher Education Council
Science and Technology Museum Campus,
Vikas Bhavan P.O., Thiruvananthapuram-695033,
Kerala State, India
www.kshec.kerala.gov.in



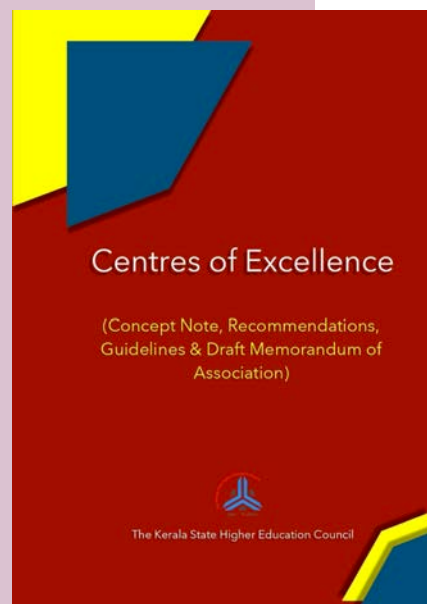
Guidelines of Centres of Excellence

Kerala State Higher Education Council published the document “Centres of Excellence: Concept Note, Recommendations, Guidelines & Draft Memorandum of Association” which outlines a comprehensive framework for establishing autonomous Centres of Excellence (CoEs) in Kerala.

It begins by defining CoEs as advanced research hubs designed to foster cutting-edge, interdisciplinary studies with global relevance but grounded in local challenges. The strategy emphasizes building CoEs with strong infrastructure, financial resources, and highly skilled academic teams to accelerate innovation and contribute to the knowledge economy. The document proposes international conferences to identify priority research domains, formation of expert search committees to appoint visionary leaders, and mechanisms to upgrade existing Departments of Excellence or Inter-University Centres into CoEs when merited.

Key focus areas include emerging scientific fields such as genomics, biotechnology, nanotechnology, robotics, neurobiology, cognitive computing, climate resilience, and imaging sciences. Essential requirements for CoEs are academic freedom, strong governance, sufficient funding, and collaboration with universities and global institutions.

The draft Memorandum of Association and rules establish the legal, governance, and administrative structure, including the roles of the Governing Body, Executive Committee, Academic Body, and Director. Provisions cover objectives, funding, accountability, government oversight, and eventual dissolution, ensuring transparency, autonomy, and alignment with state and national priorities.



Handbook for Master Trainers

The Master Trainers Handbook for Kerala's Four-Year Undergraduate Programme (FYUGP) is a comprehensive guide created to equip trainers with the strategies and tools required to lead curriculum redesign. It emphasizes the state's vision of building a knowledge society by aligning undergraduate education with global standards while tailoring it to Kerala's specific context. The handbook introduces the framework for reform, highlighting the importance of flexibility, interdisciplinarity, research, and employability. It details the structure of the curriculum, which includes foundation courses, discipline-specific pathways, electives, minors, majors, capstone projects, and research opportunities. With an emphasis on Outcome-Based Education (OBE), the handbook outlines how clear learning outcomes, assessment methods, and active learning practices can transform classrooms into student-centered spaces that foster critical thinking, problem-solving, and innovation.

In addition, the handbook defines the pivotal role of master trainers, positioning them as leaders and facilitators in the reform process. Their responsibilities span from guiding faculty in pedagogy and curriculum mapping to ensuring quality assurance, inclusivity, and alignment with accreditation standards. The text provides strategies for stakeholder engagement, continuous monitoring, and integration of emerging trends such as digital learning and vocational education. It also introduces the Academic Bank of Credits (ABC), which allows student mobility across institutions and learning modes.





Avail this hands-on training
opportunity & free LMS

www.kshec.kerala.gov.in

request can be sent to
msheckerala@gmail.com
call: 98465 89662
7561018708

Hands-On-Training (Online Mode)

Moodle-Learning Management System (LMS)

The Kerala State Higher Education Council organises hands-on workshops on specific intervals on the topic '**MOODLE-based Learning Management System (LMS)**' in online mode for the faculty members of the higher education institutions in the state. **Heads of Institutions (Colleges & University Departments) can avail of this opportunity by sending the list of faculty members.**

Workshop Topics:

- Optimizing Moodle for Effective Course Management and Resource Sharing
- Engaging Learning Experiences: Incorporating Assignments, Quizzes, and Interactive Tools
- Innovative Course Design: Pedagogical Approaches and the Use of Technology
- Enhancing Collaboration: Utilizing Wikis, Blogs, and Discussion Forums in Moodle
- Future Directions in Education: Leveraging Technology and Case Studies for Learning Improvement

KSHEC NEWS

kerala state higher education council

Region Wise Workshop for Knowledge Systems of Kerala

The Kerala State Higher Education Council (KSHEC) conducted regional workshops across the state in June 2025 to introduce the new textbook Knowledge Systems of Kerala, which has been made a compulsory course for third-semester students under the four-year undergraduate programme. These workshops, held at university-level centers, were attended by selected faculty members teaching language courses. The textbook offers a comprehensive overview of Kerala's indigenous knowledge systems, encompassing themes such as performing arts, cultural traditions, oral narratives, and Ayurveda. KSHEC has highlighted that the content aligns with the University Grants Commission's mandate to integrate Indian Knowledge Systems (IKS) into higher education, with a specific emphasis on Kerala's regional heritage. Notable sessions during the one-day workshops were led by Prof. Rajan Gurukkal (Vice Chairman), Dr. Rajan Varughese (Member Secretary), and the Council's research officers. The workshops were hosted at key academic venues: Kannur University main campus, Devagiri College (University of Calicut), SSUS Kalady (Ernakulam), SB College Changanassery (MG University), and Mar Ivanios College (University of Kerala), in partnership with KSHEC.

One week FDP on 'Training of Faculty Trainers' ToFT

Transforming Higher Education: Reforms into Action



The One Week Faculty Development Programme (FDP), titled "Training of Faculty Trainers (ToFT)", was conducted from June 24–28, 2025, at Sree Sankaracharya University of Sanskrit, Kalady. Jointly organized by KSHEC, FDC, CETLT, and SSUS, the programme centered on the theme "Transforming Higher Education: Reforms into Action." It brought together 80 faculty members from across Ernakulam, with sessions spanning Reasoning and Logic, AI in education, Outcome-Based Education (OBE), credit frameworks, and the internationalisation of Indian higher education. Renowned resource persons including Prof. K.P. Mohanan, Dr. Biju V.G., and Prof. Mohan B. Menon led interactive lectures and discussions. The residential programme aimed to foster innovative pedagogy, critical thinking, and institutional reform aligned with NEP 2020. Concluding with a valedictory session and certificate distribution, the FDP served as a platform for knowledge exchange, skill enhancement, and strengthening academic practices in alignment with global educational standard

HIGHER EDUCATION MATTERS

A GATEWAY TO HIGHER LEARNING INITIATIVES



ഒരു നല്ല ഫോട്ടോഗ്രാഫർ നിങ്ങളിൽ ഉണ്ടോ?

കാമ്പസ്സിന്റെയും ക്ലാസ്സ് മുറികളുടെയും
ആത്മാവും ഊർജ്ജവും പ്രതിഫലിക്കുന്ന
ദൃശ്യങ്ങൾ പകർത്തൂ..
ഞങ്ങളുടെ മാഗസിന്റെ പേജുകൾക്കും
കവർചിത്രങ്ങൾക്കുമായി സമർപ്പിക്കുക!"

എന്തിന്?

- നിങ്ങളുടെ സൃഷ്ടികൾ ആയിരക്കണക്കിന്
ആളുകൾ കാണട്ടെ
- പ്രസിദ്ധീകരിച്ച് ക്രെഡിറ്റുകൾ നേടു
- ക്യാമ്പസ്സിലെ നിമിഷങ്ങൾ എന്നെന്നും ജീവിക്കട്ടെ!

നിങ്ങൾ പകർത്തുന്ന അതിമനോഹരമായ
ദൃശ്യങ്ങൾ ഞങ്ങൾക്ക് അയയ്ക്കുക

☎ 7561018708

🌐 contact.hematters@gmail.com



UNIVERSITY news

universities in Kerala

University of Kerala

Bhāshaykkoru Dollar

- The University of Kerala, in collaboration with the Federation of Kerala Associations in North America (FOKANA), invites applications for the “Bhāshaykkoru Dollar” Award, instituted to recognize the best Ph.D. dissertation in Malayalam language or literature. The award is open to scholars who have received a Ph.D. in Malayalam from any university in Kerala during one of the following periods: December 1, 2022, to November 30, 2023, or December 1, 2023, to November 30, 2024. The award consists of a cash prize of ₹50,000, a certificate of merit, and a plaque. Additionally, the research supervisor of the selected dissertation will receive an honorarium of ₹5,000. Applicants must submit one hard copy and one CD copy of their thesis, along with a recommendation letter from their research supervisor. Only one dissertation per candidate will be accepted. Theses must be officially approved and published in book form by the university’s publication division to be eligible. The last date for submitting applications is July 7, 2025, by 5:00 PM. Applications should be sent to: The Registrar, University of Kerala, Palayam, Thiruvananthapuram – 695034, Kerala. Only those who have been awarded their Ph.D. from the University of Kerala are eligible to apply.

Sree Narayana Guru Endowment Award – 2023

- The University of Kerala has invited applications for the Sree Narayana Guru Endowment Award – 2023, instituted to honour research that meaningfully engages with the life philosophy and literary contributions of Sree Narayana Guru. The award is open to scholars who received their Ph.D. in 2023 from any university in Kerala, provided their thesis explores themes related to Sree Narayana Guru’s ideology or writings. In the absence of eligible Ph.D. awardees, faculty or students from departments or affiliated colleges in Kerala who have published books or scholarly articles during 2023 on the same thematic lines may also be considered. All submissions must be written in Malayalam and should be accompanied by both a hard copy and a PDF version. Applicants are required to submit the official application form, available on the university website, along with their entry. Only one submission per applicant will be accepted. The selection will be conducted by a committee appointed by the university. The completed application must be sent via registered post to the Chairman, Sree Narayana Guru Endowment Award Selection Committee, University of Kerala, Kariavattom Campus, Thiruvananthapuram – 695581. The award carries a cash prize of ₹15,000, and the last date to apply is July 18, 2025.

Kannur University

International Seminar: Themes in Historical Geography

- From June 2 to 4, 2025, the Department of History at Kannur University organized an International Seminar on “Themes in Historical Geography”, bringing together researchers and scholars from India and abroad. The seminar provided a dynamic platform for engaging with how landscapes, spatial patterns, and geographic contexts have shaped historical narratives over time. Participants presented on diverse topics—ranging from changing land use, environmental transformations, cultural geography, to regional development—anchoring discussions in both theoretical frameworks and local case studies. Through this interdisciplinary gathering, the event facilitated rich dialogue across historical geography, encouraging new methodological approaches and collaborative networks among academic peers.

Research and Recognition Advancements

- In June 2025, the University ratified PhD awards in Mathematics and Education, confirmed visiting-professor policy guidelines, and approved promotion under UGC Career Advancement—fortifying academic stature and recognizing scholarly contributions. The university approved revised Policy Guidelines for Visiting Professors, streamlining the process for engaging guest faculty while ensuring financial discipline—most notably, by removing a clause for extra honoraria. These guidelines aim to enhance academic exchange without compromising budget transparency.
-

University of Calicut

Dual Degree programmes

- Calicut University became the first in Kerala to allow dual-degree enrollment, enabling students to pursue two undergraduate or postgraduate programs simultaneously—either both full-time (without schedule conflicts), or combining full-time and distance/online modes. The initiative stems from a UGC notification dated June 5, 2025, and a six-member committee has been formed to oversee its implementation

Sree Sankaracharya University of Sanskrit (SSUS)

Kerala Institute for Gender Equity at SSUS

- On June 20, 2025, Kerala's Higher Education Minister R. Bindu inaugurated the newly established Kerala Institute for Gender Equity at SSUS, Kalady, marking a significant institutional milestone in gender studies. The institute is dedicated to conducting rigorous research and uncovering the often-neglected histories of individuals who have suffered gender-based discrimination, reinforcing the university's commitment to social justice and equality. During the same event, Minister Bindu also announced the creation of a Translation Studies Centre at SSUS, which will function as a part of the broader Kerala Language Network—an initiative launched by the state government to elevate the quality of higher education and foster international-level scholarly collaborations in linguistic and translation studies

Student Protests Over Hostel Regulations

- At the end of June, students protested against newly announced hostel curfew rules and increased fees. The regulations—like stricter entry requirements, early classroom access termination, and daily exit logging—sparked significant backlash and were met with student demonstrations.

Mahatma Gandhi University

Workshop on Research Methodology and Academic Writing in Humanities

- From June 9 to 14, 2025, MGU's School of Letters conducted an intensive six-day workshop on Research Methodology and Academic Writing in the Humanities, tailored specifically for early-stage doctoral researchers in fields such as Languages, Theatre Arts, and Fine Arts. Designed to bolster each participant's academic skill set, the programme offered a balanced mix of theoretical foundations in research design, data collection strategies, and ethical considerations, alongside practical sessions in academic writing—covering structure, argumentation, and publication techniques. The workshop was delivered in both Malayalam and English, ensuring accessibility while promoting methodological clarity in both local and global scholarly contexts. It also provided a critical platform for these emerging scholars to refine their theses, clarify research questions, and align their writing with disciplinary standards.

Anti-Drug Day Observance

- On June 26, 2025, the School of Computer Sciences at MGU organized an Anti-Drug Day. Faculty, students, and staff pledged against drug use and reaffirmed their commitment to a drug-free campus, fostering awareness, community health, and shared responsibility.

Archaeological Documentation Workshop

- Starting June 3, 2025, MGU's School of Social Sciences co-hosted a one-week workshop on Scientific Documentation of Archaeological Artefacts, in partnership with Payyanur College and Chieti University (Italy), introducing advanced techniques in artifact recording and archival research.

India Demonstrates 1 km Quantum-Secure Communication Breakthrough

In June 2025, India made a major leap in quantum communication when DRDO and IIT Delhi jointly demonstrated a successful entanglement-based free-space quantum key distribution (QKD). Conducted on the IIT Delhi campus, the experiment achieved a secure communication link over a 1 km distance, with a quantum bit error rate (QBER) under 7% and a key generation rate of 240 bits per second. This real-time demonstration confirms India's growing capability in building quantum-secure communication systems that are immune to conventional cyberattacks. The setup did not require fiber-optic infrastructure, opening avenues for secure communication in remote and mobile settings, including defence, satellites, and disaster zones. Unlike traditional encryption methods, quantum communication alerts users to any intrusion attempt, ensuring maximum data integrity. This achievement complements India's broader strategic push for an indigenous quantum network, reinforcing national cybersecurity infrastructure and accelerating the country's position in global quantum technology development.

Cochin University of Science and Technology (CUSAT)

Advanced Data Analysis Workshop

- “On June 28, 2025, CUSAT’s University Library hosted an advanced workshop on multivariate data analysis techniques, offering hands-on sessions for students and researchers to enhance their skills in complex statistical modeling and interpretation

Reading Week Celebrations

- From June 19 to 25, 2025, CUSAT commemorated Reading Week in honor of National Reading Day (Vayanadinam). The event was inaugurated at the Senate Hall by writer Vijayarajamallika, fostering literary engagement and promoting a culture of reading across campus.

Kerala University of Digital Sciences, Innovation and Technology

ATAL Faculty Development Programme

- From June 30 to July 5, 2025, DUK hosted an AICTE-sponsored ATAL Faculty Development Programme focused on the transformative role of Cloud Computing and Internet of Things (IoT) in modern healthcare. The programme, spearheaded by the Schools of Computer Science & Engineering and Electronic Systems & Automation, offered a week of expert-led theoretical sessions and hands-on labs that covered smart hospitals, remote patient monitoring, healthcare analytics, and AI-driven decision-making. Speakers from academia and industry shared real-world insights, case studies, and best practices to empower faculty, researchers, and PG students from AICTE-approved institutions. The FDP—free of cost and capped with a 30% participation limit from the host institution—served to bridge gaps between current research trends and practical healthcare applications. Participants registered via the ATAL portal and gained exposure to evolving Cloud-IoT solution architectures tailored to the healthcare domain

Kerala Veterinary & Animal Science University (KVASU)

Training “Wholesome Meat Production & Meat Processing”

- The Meat Technology Unit (MTU), Mannuthy runs a hands-on Stipendiary Training in “Wholesome Meat Production & Meat Processing” to address skilled-manpower gaps in Kerala’s meat industry. Trainees (typically VHSE Animal Husbandry/Dairying or SSLC) learn abattoir operations, hygienic processing, inspection, packaging, plant operation/maintenance; the course usually runs one year with a ₹4,500/month stipend. Selection was via walk-in interview announced on June 20, 2025 (interview fixed for July 9, with document verification), followed by an additional call for Aug 5, and a ranked list was later published for the 05/08/2025 interview. MTU has been conducting such stipend trainings since 1993 to modernize slaughterhouse practices.

Nagaland University Joins RIS University Connect Hub for Research Collaboration

In early June 2025, Nagaland University entered into a significant academic partnership with the government think tank **RIS (Research and Information System for Developing Countries)** by signing a Memorandum of Understanding (MoU). The signing, which took place between June 3 and 4, marked the university’s inclusion in the RIS University Connect Hub, joining 22 other Indian universities. This initiative aims to bridge higher education institutions with national-level policy research bodies, especially to amplify the voice and participation of universities in the Northeastern region of India. The MoU promises to facilitate extensive collaborative research, faculty and student exchange programmes, shared access to institutional resources, and structured knowledge-sharing platforms on pressing global themes such as sustainable development, climate action, and development finance.

The establishment of the **University Connect Hub** is envisioned as a transformative step in democratizing access to policy dialogue and enhancing the academic research ecosystem beyond metro-based institutions. For Nagaland University, this alliance strengthens its academic infrastructure and provides new pathways for capacity-building in interdisciplinary policy research, especially in areas of local and regional relevance. The initiative will also bring faculty and students closer to policy think tanks, enabling participation in joint publications, national consultations, and global academic forums, and ultimately reinforcing India’s vision for inclusive, knowledge-driven governance.

Thunchath Ezhuthachan Malayalam University

Workshop – Patent Searching & Drafting

- Although not mentioned directly on the university's site, the Kerala State Council for Science, Technology and Environment (KSCSTE) promoted a one-day workshop on "Mastering Patent Searching & Drafting" scheduled for June 21, 2025. Potentially relevant for researchers at TEMU

Kerala Agricultural University

MBA (Agribusiness Management) Selection Process

- KAU conducted the Group Discussion and Personal Interview for MBA (Agri-Business Management) admissions on June 18, 2025, at the College of Co-operation, Banking & Management, Vellanikkara, for shortlisted candidates

Agri-Startup Stakeholders Connect Program

- On June 20, 2025, Kerala Agricultural University partnered with MANAGE-CIA (the Centre for Innovation and Agripreneurship under the Ministry of Agriculture) to convene the "Agri-Startup Stakeholders Connect" event at KAU's Central Auditorium, Thrissur. This initiative aimed to catalyze the agri-startup ecosystem by fostering networking, knowledge sharing, and collaboration among a wide spectrum of stakeholders—including policymakers, incubators, entrepreneurs, researchers, investors, banks, and agribusiness enterprises. The program featured interactive workshops led by industry experts, product exhibitions showcasing innovative agricultural solutions, and structured networking opportunities to help startups connect with mentors, investors, and institutional partners. Serving as a bridge across the entrepreneurship spectrum, the event aimed to strengthen the regional agri-business environment and support entrepreneurial growth

APJ Abdul Kalam Technological University

Geospatial Data FDP (June 23–28, 2025):

- The Indian Institute of Information Technology Kottayam conducted a six-day online Faculty Development Programme on "Geospatial Data: Tools, Techniques, and Applications" from June 23 to 28, 2025. The workshop, facilitated by IIIT Kottayam's CSE and Cybersecurity departments, offered a blend of theoretical and hands-on sessions covering GIS fundamentals, urban infrastructure planning, environmental ecosystem monitoring, and risk-based spatial analysis using QGIS. Participants explored emerging CyberGIS applications—mapping cyber threats, safeguarding critical infrastructure, and enabling real-time risk assessment. Guided by a distinguished panel of industry and academic experts, the programme catered to faculty, researchers, policymakers, and students interested in leveraging geospatial technologies across urban, environmental, and cybersecurity domains.

Centre for Aero Space Research Drone Centre of Excellence and Remote Pilot Training

- On 16 May 2025, Kerala's Higher Education Minister Dr. R. Bindu opened ASAP Kerala's Drone Centre of Excellence & DGCA-approved Remote Pilot Training Organisation hosted at Rajadhani Institute of Engineering & Technology (RIET), Nagaroor, Thiruvananthapuram. Set up by the Government of Kerala's ASAP Kerala in partnership with Anna University's Centre for Aerospace Research (CASR), the centre is meant to pipeline skilled drone pilots and technologists into fast-growing sectors—from agriculture and surveying to disaster management and defence. The launch day featured a seminar and live drone exhibition (headlined by space scientist Mylswamy Annadurai) and hands-on demos for students.



- The Minister framed drones as a major employability lever and signalled further expansion by announcing the next CoE in Thrissur. Training at RIET includes Remote Pilot courses aligned with DGCA norms (e.g., small-category/VLOS offerings listed by ASAP Kerala), delivered with CASR's technical backing. Dignitaries included Attingal MLA O. S. Ambika, ASAP CMD Usha Titus, CASR Director Senthil Kumar, and RIET leadership

Kerala University of Fisheries and Ocean Studies

Aquatic Biodiversity Restoration in Chalakudy River

- In a notable conservation initiative during June 2025, KUFOS partnered with the Annamanada Grama Panchayat to restock the Chalakudy River with 1,500 fingerlings and broodstock of two endangered native fish species—the yellow catfish (*Horabagrus brachysoma*, or Manjakoori) and the olive barb (*Systomus sarana subnasutus*, or Kuruva). The restocking was conducted as part of a broader biodiversity restoration model aimed at reviving dwindling native fish populations through scientific intervention and community participation. Local residents, schoolchildren, and university researchers actively took part in the event, reinforcing the role of citizen science and local governance in sustainable inland fisheries management. This initiative not only supports ecological restoration but also serves as a replicable model for fishery-based biodiversity recovery across Kerala's riverine systems.



Polar Science MOOC Workshop (Two-Day Program)

- In June 2025, KUFOS collaborated with the National Centre for Polar and Ocean Research (NCPOR) and the Ministry of Earth Sciences (MoES) to organize a two-day workshop as part of the national Polar Science and Cryosphere MOOC initiative. The workshop aimed to introduce students, early-career researchers, and faculty to India's polar expeditions, with a focus on the Arctic and Antarctic ecosystems, cryosphere studies, and climate dynamics. Sessions included expert lectures, interactive learning modules, and demonstrations on polar data collection and satellite-based cryospheric analysis. The program promoted awareness of India's strategic role in polar science and encouraged multidisciplinary research across fisheries, oceanography, and climate change. It also supported the broader national goal of building future-ready talent for polar and marine environmental research.

Kerala Kalamandalam Deemed University

International Festival of Kutiyattam (July 29 – August 2, 2025)

To commemorate the 60th anniversary of its Department of Kutiyattam, Kerala Kalamandalam is hosting a prestigious International Festival of Kutiyattam – a five-day global gathering slated for July 29 through August 2, 2025, at its campus in Cheruthuruthi, Thrissur. This festival—“Kutiyattam: Past, Present & Future”—features:

- Enchanting daily performances by revered Kutiyattam maestros including Padma Shri Kalamandalam Sivan Namboodiri, Ammannur Kuttan Chakyar, Kalamandalam Rama Chakyar, Kalamandalam Girija, Kalamandalam Eswaranunni, and Usha Nangiar.
- Engaging scholarly sessions, including lectures, panel discussions, and lecture-demonstrations by national and international scholars, fostering dialogue on the evolving legacy of Kutiyattam across history and contemporary expression.

This festival stands as a culturally resonant celebration—not merely of form, but of continuity across centuries. Since its establishment in 1965, Kerala Kalamandalam has been instrumental in reviving and institutionalizing Kutiyattam, transitioning it from temple-exclusive performances to global stages and academia—a transformation pioneered by Guru Painkulam Ramachakyar



Kerala Kalamandalam 'Kalagrandham' Award

- In early 2025, the university announced its Kalagrandham Award, conferred annually upon the most outstanding work of art literature. The award includes a cash prize of ₹30,000, along with a plaque, certificate, and ceremonial shawl (ponnada)

JOIN THE CONTRIBUTORS CLUB OF
'HIGHER EDUCATION MATTERS'
AND NOURISH THE ACADEMIC
CONTENTS OF THE MAGAZINE

CONTRIBUTORS CLUB HAVE A STORY TO TELL?

We invite scholars, academicians, students, and faculty members to share their insights, research, and stories in our magazine!

Your expertise and perspectives are invaluable in shaping this magazine that educates, inspires, and sparks thoughtful discussion among readers. Whether it's an experience on your latest research, campus life, a reflection on current trends, or an in-depth analysis of your field, we welcome your contribution.

Join us in creating a platform where knowledge thrives and ideas come to life—**submit your work not exceeding 500 words**, today!



AI in Healthcare: Virtual Labs at Stanford

Stanford University developed virtual laboratories staffed by AI "scientists" that mimic human lab dynamics. Tasked with designing a better COVID-19 vaccine, the AI opted to use nanobodies—smaller, simpler antibody fragments—improving modeling efficiency and ultimately producing a stable, highly effective molecule in real-world tests. This approach demonstrates the potential of AI in accelerating medical research and innovation



Climate Science: University of California

The University of California has made significant strides in climate science, focusing on areas such as methane and aerosol emissions. These insights are crucial for developing effective strategies to combat climate change and its associated impacts. The research emphasizes the importance of understanding and mitigating factors contributing to global warming



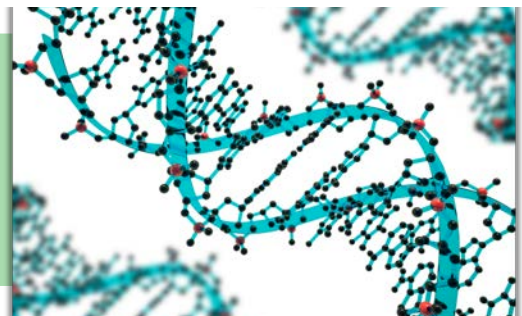
Genomics: AI-Powered Fertility Treatment

Researchers at Columbia University Fertility Center used an innovative AI tool called the STAR method to identify scarce, previously undetectable sperm cells in a case of azoospermia. These sperm cells were then used to successfully fertilize eggs, resulting in a pregnancy after 18 years of infertility. This achievement marks a major milestone in fertility care and offers new hope to couples facing similar challenges



CRISPR: Personalized Gene Editing

In a historic medical breakthrough, a child diagnosed with a rare genetic disorder was successfully treated with a customized CRISPR gene editing therapy by a team at Children's Hospital of Philadelphia (CHOP) and Penn Medicine. This marks a significant advancement in the application of CRISPR technology for personalized medicine



Smart Bandage Detects & Kills Wound Infection

Scientists at BITS Pilani-Hyderabad have engineered a smart bandage that non-invasively detects bacterial infections in wounds and autonomously eradicates them without antibiotics. It visually signals infection presence and functions via embedded chemical agents and responsive nanomaterials. The research, led by junior researcher Vaishnavi N with Professors Ganesan and Dutta, was published in ACS Infectious Diseases. This innovation addresses antibiotic resistance and improves wound care, particularly in resource-limited settings



Portable Bone-Cancer Biosensor

IIT BHU's team, led by Prof. Pranjal Chandra, built a portable, reagent-free immunosensor to detect osteopontin (OPN)—a key biomarker of osteosarcoma. This low-cost biosensor, published in Nanoscale, uses nanomaterial-based gold/redox electrodes to yield fast and accurate results—akin to a glucose meter. Field-ready and smartphone-integrable, it holds great promise for rural diagnostics of pediatric bone cancer without need for labs or expensive reagents.



Guava Genomics for Precision Breeding

Punjab Agricultural University (PAU) won ₹4crore funding from DBT for a five-year genomics project targeting predictive breeding in guava. The effort will develop a pangenome and SNP-array for Allahabad Safeda and other varieties, enabling selection for traits like seedlessness, shelf life, and nutraceutical content. Marker-assisted selection will accelerate breeding, increasing yield and quality while benefiting farmers and consumers with superior fruit varieties.



AI-Powered Smart Camera for Autism Detection

Researchers from Mahatma Gandhi University (MGU), Kottayam, have developed and patented a smart version of the "Niriksherja Camera" (Observation Camera) to monitor behavioral patterns in children with autism. Enhanced with infrared and ultrasonic sensors, the system detects actions like walking, jumping, and hand-flapping, using AI and deep learning to identify atypical behavior and generate reports. Tested on 83 children at Kottayam Medical College, it achieved 91% accuracy.



Twinning Programmes

Twinning programmes are collaborative academic arrangements between two educational institutions—typically one domestic and one international—allowing students to complete parts of their degree at each institution. Commonly structured as 2+2 or 1+3 years, students begin their studies in their home country and transfer to the partner university abroad to complete the remainder. These programmes offer the advantage of international exposure, cost-effectiveness, and access to diverse academic resources without completing the entire course overseas. Students benefit from dual-campus learning, cultural exchange, and enhanced career prospects through global networks. Twinning also allows credit transfer, joint curriculum development, and faculty exchange between institutions, ensuring academic continuity and standardization. In India, such programmes are gaining popularity, especially in engineering, business, and health sciences, often tied with universities in the U.S., U.K., Australia, and Europe. Regulatory bodies like UGC are formalizing guidelines to ensure quality assurance and student protection in such partnerships.

Translational Research

Translational research is the process of transforming scientific discoveries from academic or laboratory settings into practical applications that benefit society. It serves as a critical bridge between basic research and commercial or clinical use, ensuring innovations do not remain confined to theoretical models or journal publications. The goal is to accelerate the development of technologies, treatments, or solutions that can be implemented in real-world scenarios. This includes steps like prototype development, validation, regulatory approval, and scaling for the market. In fields such as medicine, engineering, agriculture, and information technology, translational research plays a pivotal role in converting lab results into usable products, such as new drugs, medical devices, diagnostic tools, or AI systems. Universities and research institutions often support this process through incubators, technology transfer offices, and industry partnerships. Ultimately, translational research ensures that public investment in science leads to measurable societal and economic impact, enhancing innovation ecosystems.

Cross-disciplinary Literacy

The Cross-disciplinary Literacy promotes understanding across scientific disciplines by addressing the limitations of rigid specialization. Over time, science has evolved into narrowly defined sub-disciplines, creating disciplinary silos that hinder broader communication and holistic understanding. As knowledge advances, many fields now intersect—known as cross-disciplinary or interdisciplinary areas—combining elements from physics, chemistry, biology, and engineering. Examples include plasma physics, shockwave studies, nanotechnology, and genomics, which rely on shared tools like X-ray crystallography, NMR spectroscopy, and microarray technologies. These fields also involve science-tech hybrids working in microspaces and milliseconds. As distinctions blur between classical disciplines, educators need to be cross-disciplinary literates—proficient in understanding and using terminology across multiple fields. This initiative prepares teachers to navigate and teach in this evolving landscape by familiarizing them with theoretical concepts that span disciplines, enabling effective communication and integrated teaching in modern science education.

University of Kerala

General Enquiry: 9188526671
 Email: helpdesk@keralauniversity.ac.in
 Helpdesk (WhatsApp only): 8547330240
 Examination Helpdesk:
 9188526674 / 9188526670 / 9188526675
 Registrar's Office:
 0471-2305631
registrar@keralauniversity.ac.in
 Controller of Examinations:
 0471-2305946
ku.controller@keralauniversity.ac.in
 Finance Officer:
 0471-2300750
 Computer Centre:
 0471-2305801
kucc@keralauniversity.ac.in
 School of Distance Education:
 0471-2991173
sde@keralauniversity.ac.in

University of Calicut

General Enquiry (SUVEGA):
 0494 2660600
 Email: suvega@uoc.ac.in
 Vice Chancellor's Office:
 0494 2407102
vcoffice@uoc.ac.in
 Registrar's Office:
 0494 2407104
reg@uoc.ac.in
 Pro Vice Chancellor's Office:
 0494 2407103
pvc@uoc.ac.in
 Pareeksha Bhavan:
 0494 2407200
ce@uoc.ac.in
 Public Relations Office:
 0494 2407227
pro@uoc.ac.in
 Directorate of Admissions:
 0494 2407016 / 0494 2407017
doa@uoc.ac.in
 Centre for Distance and
 Online Education:
 0494 2407356 / 0494 2400288
sde@uoc.ac.in
 Dean of Students' Welfare:
 0494 2407353
dswoffice@uoc.ac.in
 Calicut University Computer Centre:
 0494 2407527
dcucc@uoc.ac.in

Kerala University of Fisheries and Ocean Studies (KUFOS)

General Enquiries: 0484-2701085
 Email: uttypanangad@kufos.ac.in
 Admissions Office:
 0484-2701085 / 0484-2700598
admissions@kufos.ac.in
 Registrar's Office:
 0484-2703782
registrar@kufos.ac.in
 Vice Chancellor's Office:
 0484-2700964
vc@kufos.ac.in
 Controller of Examinations:
 0484-2703782
coe@kufos.ac.in
 Public Relations Office:
 0484-2703782
pro@kufos.ac.in
 Directorate of Research:
 0484-2703782
research@kufos.ac.in
 Directorate of Extension:
 0484-2703782
extension@kufos.ac.in
 Library:
 0484-2703782
library@kufos.ac.in
 IT Cell:
 0484-2703782
itcell@kufos.ac.in

Digital University Kerala

General Enquiries:
 +91-471-2788000
 Email: info@duk.ac.in
 Admissions Office:
admissions@duk.ac.in
 Registrar's Office:
registrar@duk.ac.in
 Controller of Examinations:
coe@duk.ac.in
 Public Relations Office:
pro@duk.ac.in
 Technical Support:
support@duk.ac.in
 Vice Chancellor:
 +91-471-2788000
vc@duk.ac.in

Kannur University

General Enquiry: 0497 2715185
 WhatsApp: 8547016185
 Email: enquiry@kannuruniv.ac.in
 Registrar's Office:
 0497 2715331
registrar@kannuruniv.ac.in
 Controller of Examinations:
 0497 2715351
ce@kannuruniv.ac.in
 Academic Branch:
 0497 2715221
academic@kannuruniv.ac.in
 School of Distance Education:
 0497 2715251
sde@kannuruniv.ac.in
 Research Directorate:
 0497 2715208
research@kannuruniv.ac.in
 IT Centre:
 0497 2715375
itcentre@kannuruniv.ac.in

Sree Sankaracharya University of Sanskrit (SSUS), Kalady

General Enquiry: 0484 269 9731
 Helpline: 8301853380
 Email: reg@ssus.ac.in
 Vice Chancellor's Office:
 0484 2463580 (Office)
 09744631327
vc@ssus.ac.in
 Registrar's Office:
 0484 2463480 (Office) / 9446061639
reg@ssus.ac.in
 Public Relations Office:
 0484 2463380 / 9447123075
 Dean of Students' Welfare:
 9446762054
dss@ssus.ac.in
 Computer Centre:
 +91 484 2463380

Cochin University of Science and Technology (CUSAT)

General Enquiry:
 0484 2577290 / 0484 2862281
 Public Relations:
 0484 2577550
 Directorate of Admissions:
 0484 2577100 / 0484 2577159
admissions@cusat.ac.in
 Office of International Relations:
 0484 2862255
oir@cusat.ac.in
 Controller of Examinations:
 0484 2576623 / 0484 2577109 /
 0484 2862240
controlex@cusat.ac.in
 Academic Matters:
 0484 2576623
 Service Matters:
 0484 2575181
registrar@cusat.ac.in
 Planning:
 0484 2576419
 Security Office (24 Hours):
 0484 2575101

Mahatma Gandhi University, Kottayam

University Front Office
 (Enquiry):
 0481 2733375 / 2733505 / 2733516 /
 2733580 / 2733626
 Email: frontoffice@mgu.ac.in
 Vice Chancellor's Office:
 0481 2731001
vc@mgu.ac.in
 Registrar's Office:
 0481 2731006
registrar@mgu.ac.in
 Controller of Examinations:
 0481 2733333
ce@mgu.ac.in
 Public Relations Officer (PRO):
 0481 2733370
pro@mgu.ac.in
 Online Equivalency/
 Eligibility Certificates:
 0481 2733503
mgucerhelp@mgu.ac.in
 E-Payment Assistance:
epayhelp@mgu.ac.in

Kerala Veterinary and Animal Sciences University (KVASU)

General Enquiries:
 04936-209220
 Vice Chancellor's Office:
 04936-209209
vc@kvasu.ac.in
 Registrar's Office:
 04936-209220
registrar@kvasu.ac.in
 Public Relations Officer:
 04936-209230
 Directorate of Academics and
 Research:
 04936-260263
officedar@kvasu.ac.in

Kerala Agricultural University (KAU)

General Enquiries: 0487-2438011
 Email: info@kau.in
 Vice Chancellor's Office:
 0487-2438001
vc@kau.in
 Registrar's Office:
 0487-2438011
registrar@kau.in
 Controller of Examinations:
 0487-2438106
ce@kau.in
 Director of Research:
 0487-2438101
dr@kau.in
 Director of Extension:
 0487-2438131
de@kau.in
 Comptroller:
comptroller@kau.in
 Public Relations Officer:
 0487-2438182
pro@kau.in
 IT Cell:
 0487-2438188

Kerala Kalamandalam – Deemed University for Art & Culture

General Enquiries:
 +91 4884 262418
 Email: info@kalamandalam.ac.in
 Vice Chancellor:
 +91 4884 262418
 Registrar:
 +91 4884 262562
 Public Relations / Tourism &
 Publications:
 +91 4884 262305
 Nila Campus:
 +91 4884 262485
 Heritage Visit Inquiries:
heritagevisit@kalamandalam.ac.in

Kerala University of Health Sciences (KUHS)

General Contact Numbers
 Phone: 0487 2207650, 0487 2207664,
 Email Support:
 General Helpdesk:
helpdesk@kuhs.ac.in
 Finance Office: fo@kuhs.ac.in
 Student Registration Queries:
contact1@kuhs.ac.in
 Vice Chancellor
 Phone: 9847138211
 Email: vc@kuhs.ac.in
 Registrar: 0487 2207651
 Controller of Examinations:
 0487 2207660
 Public Relations Office:
 0487 2207652
 Library: 0487 2207653
 Official Websites:
www.kuhs.ac.in

APJ Abdul Kalam Technological University (APJAKTU)

General Enquiries: 0471-2598122
 Email: university@ktu.edu.in
 Technical Support:
 0471-2593120 / 2593128 / 2590029
support@ktu.edu.in
 Vice Chancellor's Office:
 0471-2598222
 Registrar's Office:
 0471-2598722 / 2785615
 Controller of Examinations:
 0471-2785617
 Dean (Research):
 0471-2785626
 Dean (Academics):
 0471-2785638
 Finance Officer:
 0471-2785624

National University of Advanced Legal Studies (NUALS), Kochi

H.M.T. Colony P.O., Kalamassery,
 Ernakulam, Kerala – 683503
 General Enquiries: +91 94468 99006
 / +91 94468 99035
 Email: registrar@nuals.ac.in
 Vice Chancellor (Acting): Justice S.
 Siri Jagan (Retd.)
vc@nuals.ac.in
 Registrar: Dr. Lina Acca Mathew
registrar@nuals.ac.in
 Controller of Examinations: Dr.
 Asha G.
controllerofexaminations@nuals.ac.in
 Finance Officer: Sri. Arun Kumar S.
fo@nuals.ac.in
 Public Relations Officer
 +91 94468 99062
pro@nuals.ac.in

Thunchath Ezhuthachan Malayalam University, Tirur

General Enquiries: 0494-2631230 /
 +91 91880 23237
 Email: info@temu.ac.in
 Vice Chancellor:
 0494-2631230
vc@temu.ac.in
 Registrar:
 0494-2631230
registrar@temu.ac.in
 Controller of Examinations:
 0494-2631230
ce@temu.ac.in
 Finance Officer:
 0494-2631230
fo@temu.ac.in
 Library:
library@temu.ac.in
 Publications Division:
publication@temu.ac.in

SUBSCRIPTION FORM & INVOICE BILL/ADVERTISEMENT BILL

(To be filled by the subscriber/advertiser)

Name & Address _____

Pin _____

State _____ email _____ Ph _____

Payment Details (UTR No./Reference No. _____ date _____)

GST Number : _____

SCAN & PAY

PAYMENT details:

Mode: Demand Draft / Online Transfer / Cheque/UPI ID (73854301@ubin)

Name of the Account: **The Kerala State Higher Education Council**

Bank Name: **Union Bank of India**

Account Number: **336302010139637**

IFSC Code: **UBIN0533637**

GST Number: **32TVDT01459D1D3**

UPI ID: **73854301@ubin**



UPI ID : 73854301@ubin

(On completion of the payment, this form may be sent to email: contact.hematters@gmail.com)

Higher Education Matters Magazine

O/o The Kerala State Higher Education Council, Science and Technology Museum Campus,
Vikas Bhavan P.O., Thiruvananthapuram-695033, Kerala, India

[7561018708, 9447595021] | [contact.hematters@gmail.com; heckerala@gmail.com]

(Following part will be filled by the KSHCE Office)

Bill No: _____ Subscription No: (if applicable) _____ Date: _____

Your Ref.: _____

Re: Print Subscription for One Year/Advertisement charge

Subscription Period: Month _____ Year _____ to Month _____ Year _____

Please tick (whichever is applicable)

Description	Amount (INR)
1 Year Print Subscription	₹1,000.00
Advertisement charges	₹20,000/- ₹15,000/- ₹10,000/-, ₹5000/- (tick whichever is applicable)

Total: ₹ _____

Important: Subscription rates are subject to revision. The revised rates will apply from the date of revision. Payment requested within 30 days of the invoice date.

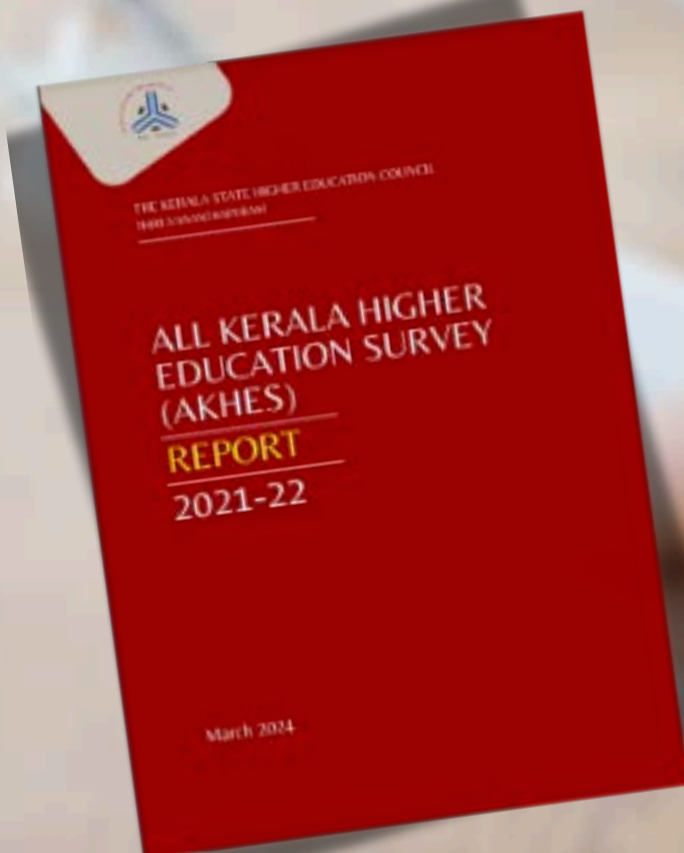
For [Higher Education Matters]

✍️ Authorized Signatory

All Kerala Higher Education Survey

Developing a comprehensive database of higher education institutions in the state based on several parameters including state specific features with time bound updation. To strengthen official statistical system for review of the performance of education sector in its regional divergences across the state. This scheme for is similar to AISHE

- KSHEC conducts survey of Higher Education Institutions on Academic/ Infrastructure components on an annual basis.
- This scheme of the survey is at par with All India Higher Education Survey (AISHE).
- It includes state-specific details on Higher Education in Kerala.
- Annual maintenance of portal facility, publication of Annual Report and the other infrastructure updation is necessary for creating the state level data in Higher Education.





Community disaster risk reduction camp in Vilangadu village by NSS Unit of Sree Sankaracharya University and KSDMA evaluated resilience.



Zero Waste Programme at Government College Kasaragod,, a successful model of campus sustainability through effective waste management practice (NSS Unit)

TOP
SCOPUS
QUARTILE 1
RANKING



READ
LATEST
RESEARCH

Higher Education for the Future is a bi-annual peer-reviewed multi-disciplinary journal that is designed to shape the new generation of higher education based on national and international experience. It seeks to address a wide spectrum of issues including policy, pedagogy, and research in higher education.



Higher Education for the Future (HEF) is published by the Kerala State Higher Education Council in collaboration with SAGE Publication



subscribe now