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S Prabu Shankar and S Jebah Suganthi

Digital Education Initiatives: A Guide to Transformative Pedagogical Practices

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Enhancing Reading Habits and Cultivating Critical Perspective through Literature: Nurturing the Intellectual Growth of Higher Education Students

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Digital Education Initiatives: A Guide to Transformative Pedagogical Practices

S Prabu Shankar* and S Jebah Suganthi**

Perspectives of Digital Education

As the slogan 'Education is for all', in the present context, 'Digital Education for all' is the call and focus that stands as a priority in the developmental aspects focused by the Indian Government. 'No one is left behind' in terms of accessibility and adaptation of digital facilities is the vital objective of digital education policies of the government. The recent G-20 framework for systems of Digital Public Infrastructure aims at developing 'a shared set of digital systems' to drive digital development, digital innovation, inclusion, trust, competition and respect towards human rights and fundamental freedoms; it may be perceived that this ultimatum can be achieved through Education. Digitalizing education is the way forward by which all the developments are made possible.

Focus on digital education, devising the development of digital infrastructure, digital content development, use of digital tools for capacity building to address educational needs at all levels, ensuring equitable use of technology, developing skills and competencies aiming at revolutionizing education are the focus of enhancing quality of education and transforming the present educational system. NEP (2020) envisages a thorough adaptation of digitalization aiming at fostering unique capabilities of every student. The policy aims at using technology extensively in the teaching-learning process in order to remove language, accessibility and adaptability divides not only for the mainstream students but also for the physical challenged (Divyang) students by the use of enabling technologies, namely use of assistive, immersive technologies (Augmented Reality, Mixed Reality, Virtual Reality, Extended Reality, Haptic technology, Blockchain, Cloud computing, Machine learning, Fully immersive VR, Simulation, Digital twin technology), NEP (2020) envisages to transform education scenario into a robust system that is comprehensive and adaptive of both digital and non-digital versions of technology.

Digital Initiatives

Central government's major flagship initiative Digital India campaign and its focus in transforming the society into a digitally empowered knowledge society with its primary aim of improving internet connectivity and infrastructure for 5G connectivity that is

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ensured by 'Digital India' project. The Nine pillars of Digital India programme is a pioneering initiative by Department of Electronics and Information Technology (DeitY) that concentrates on improving digitalization aiming at national development, opening up new venues at all levels of education. DeitY digital programme initiative Common Service Centers (CSC 3.0) aims at enabling access to government e-services across rural areas and with regard to education at the schools. Universities are brought under National Knowledge Network (NKN) which are facilitated with upgraded Wi-Fi, improved accessibility, developed digital infrastructure, creating digital tools etc.,

NEP-2020 initiates the use of digital platforms, e-teaching and learning resources and also encourages digital oriented curriculum from the primary to higher education level. National Educational Alliance for Technology (NEAT) an initiative of National Educational Technology Forum (NETF) is aimed at bridging the gap between Education and Educational Technology companies (EDTech) that develops online content, Learning Management Systems (LMS), Blended Teaching Learning solutions. Another significant initiative of NETF being National Digital Education Architecture (NDEAR) Ministry of Electronics and Information Technology (MeitY) launched 'Digital India' programme aiming at transforming the society into a digitally empowered and knowledge-based economy one by guaranteeing Access, Inclusion, Empowerment to digital resources and to bridge digital divide. National Academic Depository (NAD) and the National Internship Portal of AICTE are to be brought under NETF. Already there seems a substantial change in the adaptation of ICT based teaching-learning and Learning Management Software are widely being adapted in the educational system by institutions at large and by individuals at all levels. Still affordability, equitable access in adopting technology based education in view of rural-urban divide, economic, socio-cultural divide, accessibility divide pose a major networking challenge in fullest adaptation.

Present Scenario of Digitalizing Education

In the present scenario, the technology that is being adapted has to support the goals of equitable educational opportunities that support sustainable development; founded on the values of equality, social and economic justice, and human rights.

Intriguing instances of technology in the previous decades aimed at expanding access to knowledge and information, enhancing educational procedures, and enhancing learning outcomes that made educational developments possible through Information and Communication Technology across. However, these instances of development in education are not often sufficient and enough in terms of the development happening in related domains. There are growing indications that the digital revolution of education comes with unacknowledged difficulties possibly with new avenues in line with the technology revolution happening across education systems.

In addition to increasing distinct ways of students learning, enlarging and transforming educational experiences, blending teaching and learning, undermining teacher autonomy, adverse environmental impacts, infringing on autonomy and assurance, and integrating authority and influence outside of public scrutiny are just a few of the numerous ways that technology can worsen learning inequality, as observed by policy makers, educators and stakeholders. Under the ageis of PM e-Vidya, Ministry of Education offers high quality educational programmes through DTH channels and web-platforms especially for the benefit of rural, tribal and remote areas. DIKSHA the digital infrastructure for providing quality e-content for school education has clocked more than 524 crore learning sessions with 3,17,496 pieces of e-contents (as on July 2023). Swayam Prabha channels in higher education is functional with 22 channels. Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM), the national MOOC Platform aims at providing quality study courses across the streams with provision of credit transfer to Universities, for higher education courses.

Technology Adoption

There are numerous benefits to open-source digital educational platforms that are globally attainable, such as websites, gadgets, and applications. They may provide students, instructors, parents, and other education stakeholders with rich and interesting information that enhances and supplements classroom instruction. Additionally, they can guarantee that education will not be interrupted and increase the number of educational opportunities available to students who face obstacles because of an intellectual impairment,

controversy, hardship, cultural background, race, or other considerations. Public digital platforms could empower educators and parents in addition to students, and they can encourage more engaging, dynamic, and cooperative approaches to teaching and learning inside and outside of the classroom. Though there are complexities in the implementation of digital education across the educational system the prospects seems viable with multimodal initiatives by the Central and State Governments in transforming the educational process.

Optimizing Digital Education

Digital education is primarily referred to technology enhanced learning, that happens through the adaptation of technology and innovative use of technology enabled tools, digital platforms, systems and resources, applications that involve adaptive learning using social media tools, online resources, automated learning software and learning management systems that creates learning opportunities beyond the traditional classrooms; thus innovating and transforming the means, mode and process of learning. The significant features of digital learning are Content, Capacity and Connectivity (UN Transforming Education Summit Report, 2022).

- **Content** - All students, instructors, and facilitators must have access to high-quality, curriculum-relevant digitally instructional and learning resources employing digital learning platforms.
- **Capacity**-To guarantee that instructors, students, and other education stakeholders have the expertise and understanding required to utilize digital tools for learning using based on research practices, the capacity to use digital technology to improve learning must be increased.
- **Connectivity**-The implementation of digital accessibility implies that all educational institutions and individuals could benefit from the benefits of high-speed internet connections and related educational advantages.

National Education Policy (2020): Digital Education Perspectives

A plan for reforming the use of technology and its integration, online and digital education Indian educational system has been outlined in Part III,

chapters 23 and 24 of National Education Policy (NEP)- 2020, with an emphasis on technological integration, experiential learning, and holistic development. The NEP 2020 acknowledges the value of digital education and highlights the necessity of incorporating it within the academic programme.

The New Education Policy-2020 emphasizes the place of technology and its impact on education and the changes that are visible in the present day context. The rapidity of digitalization and its impact in education is attributed to the development of technology in all the domains of education. The policy continues by stating that technology integration and utilisation to enhance a variety of educational goals shall be encouraged and accepted, provided that these interventions be thoroughly and openly assessed in pertinent settings prior to being expanded.

The National Education Policy- 2020 endorses the emergence of the National Educational Technology Forum (NETF), an independent organisation that serves as a forum for the open sharing of ideas on how to use technology to improve teaching, learning, evaluation, planning, administration, and other areas in both higher education and the classroom. The NETF will act bridge the divide between the educational institutions, governmental organizations and the stakeholders; thus providing the basis for recent knowledge, innovations in the field of education, research and development. NETF will create avenues for consultation and extension by sharing knowledge on the vital components of digital developments, the best practices in technology based education. The NETF will carry out the following duties: - provides impartial, fact-based guidance on interventions based on technology to State and national government bodies; to develop institutional and intellectual capabilities in the field of education technology; to provide guidelines for pedagogy, technology, and content for digital and online teaching and learning. States, Boards, Schools, Higher educational institutions, and others will be able to create e-learning guidelines with the use of these standards. To determine which technological interventions can be used to improve the teaching-learning and evaluation process, aid in the professional development of teachers, increase educational access, and optimize planning, leadership, and administration of education, including the admissions, attendance, and assessment

processes. The four principles of NETF that acts as a guideline for adoption of digital technologies are presented in Fig.1.

Digital Learning: Empowering Learners

A key factor in the effective integration of modern technology into educational programmes is the availability of excellent, pertinent, and suitable material; platforms and solutions that organize and distribute that information; and Open Educational Resources (OERs). Education and connection need to be used for more than just putting classrooms online. They should empower students and assist them in gaining the self-control and accountability needed to advance in life as well as the fortitude and self-assurance needed to overcome obstacles. Empowering learners is about providing learning solutions on top of connection; once connectivity is established, it’s about making peers, resources, and technical assistance more accessible so that learners have more opportunities, choices, and access to knowledge.

Along with ensuring inclusivity, supporting regional responsibility and decision-making, facilitating the integration of digital innovations for high-quality learning in classrooms and through remote instruction, and creating value for the nations creating and implementing these solutions; the notion of empowering learners also aims to assist governments in identifying, evaluating, and supporting these solutions. In addition, school

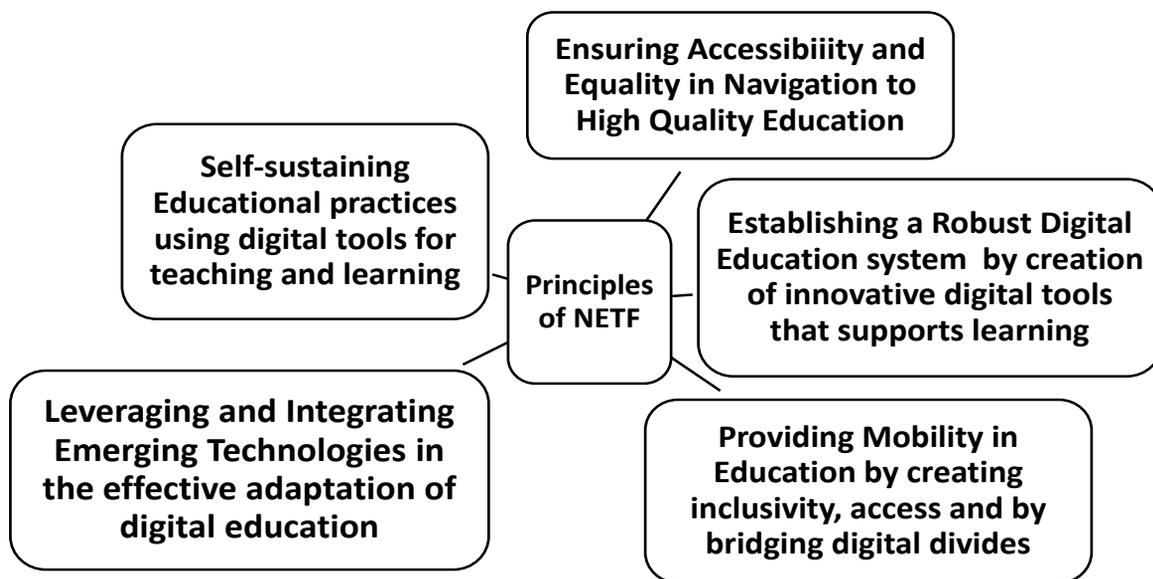
association needs to empower students who use the internet by giving them access to excellent, meaningful, inclusive, and timely information that is presented via revolutionary instructional methods and secure, safe platforms. Principles for localization, inclusivity, transparency, safety, and security must be taken into consideration while creating high-quality, relevant, and inclusive content. In order for students to have orientation towards digital education and the various digital tools the digital infrastructure, the accessibility and resources availability should be made possible and necessary skills on how to integrate these tools and make use of it should be provided to them.

Technology-Enabled School Model

UNESCO has been working on creating a framework of guidelines for using technology in schools to guarantee continuity and high standards of instruction for all students. The goals of the UNESCO model for technology-enabled education are as follows:

- Provide comprehensive guidance on how to design technology-enabled, crisis-resilient educational systems that enable students to access school curricula across a number of connected learning environments, thereby preventing emergencies or crises from impairing their right to an education.
- Provide strategies for mobilizing resources and support to strengthen the capacities of educational organizations as well as stakeholders in enhancing

Fig.1 Principles of National Educational Technology Forum



the readiness towards a more crisis-responsive educational system. Educate the requisite technology, content, and personnel infrastructure and constitute aspects of the technology-enabled crisis-resilient school systems.

- In order to advance inclusiveness, equity, gender equality, and the excellence of learning in the context of attaining SDG 4 by 2030, direct the use of technology in a variety of learning settings. Additionally, promote the professional growth of educational professionals and other pedagogical facilitators.

SDG 4 – Quality Education and Artificial Intelligence (AI)

Using Artificial Intelligence to accomplish Quality Education (SDG 4) presents a number of unique hurdles, despite the technology’s potential in education. Beyond these more general challenges, humanity needs to overcome AI’s potential, minimize its drawbacks, and create education systems that are prepared for the future. First, it is unclear how artificial intelligence will affect educators, learners, and society at large. This covers inquiries into the effectiveness of AI interventions, the pedagogies selected for Artificial Intelligence tools, the privacy of students, the roles of instructors, and the subjects that ought to be taught at colleges and universities.

The core of contemporary approaches to artificial intelligence, which present a number of difficult questions about data analysis and privacy, possession, and protection. In the opinion of Jobin et al. (2019), there has been a lot of attention paid to these ethical challenges. Comparably, a lot of study has also been done on the ethics of educational data which has brought up additional concerns about informed permission, data management, and perspectives (e.g., institutional vs. individual) on data. Any use of artificial intelligence in educational

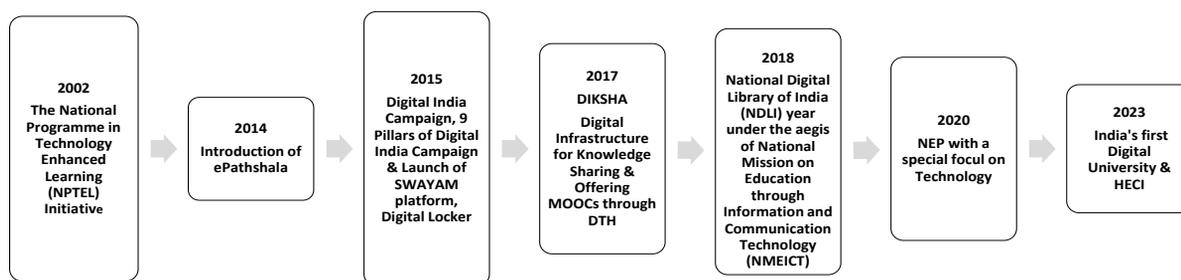
settings has to appropriately handle these numerous data-related concerns as well as other challenges unique to education, such pedagogy selection.

Adaptation of AI based Digital Tools for Pedagogical Practices

Multidisciplinary planning and cross-sectorial governance; policies on fair, inclusive, and moral Artificial intelligence use; Create a master plan for integrating Artificial intelligence into education management, instruction, learning, and assessment; Pilot testing, tracking, and assessment, as well as accumulating evidence; Supporting regional Artificial intelligence innovations for education.

- Set and track quantifiable goals to guarantee equity, diversity, and inclusion in instruction and AI service development
- Examine ways that Artificial Intelligence (AI) may enhance Educational Management Information Systems (EMIS).
- Permit EMIS to undergo a comprehensive change and to be integrated with Learning Management Systems (LMS).
- Enable educators, supervisors, and students to encourage the use of AI-powered LMSs and EMIS.
- Place a strong emphasis on the social and agency needs of students when incorporating AI-based technologies.
- Examine and modify curriculum to take into account changes in evaluation and pedagogy brought about by the growing use of AI in education:
- Evaluate and implement AI technology to facilitate the evaluation of many aspects of competences and results.

Fig.2 Digital Education Development in India in the Last Two Decades



- Examine and evaluate the responsibilities that educators play in promoting human values, higher-order thinking, human contact, and information transmission.
- Describe the skill sets needed for educators to look for and use AI technologies in the planning and structuring of educational activities as well as in their own professional growth.
- Consistently search for and encourage the application of AI to assist a variety of teaching pedagogies and lifelong learning approaches.
- Create AI systems and tools to track credentials and learning outcomes across academic levels and locations. Provide training and ongoing support to teachers so they can become proficient in using AI. Include AI-related skills in school curricula and vocational and technical education and training credentials.

Challenges of Incorporating Digital Technology in Teacher Education

One of the settings where innovation and change in digital education may be most strongly influenced is teacher education. This means that firstly teacher education programmes must take into account the societal trends and change-causing factors that have been recognised. The way digital technologies are increasingly influencing how people communicate and how work and leisure are organised in society is one of the major challenges that come with the way the world is and will continue to change. It is apparent that there are certain obstacles and challenges in the way of making the use of digital technology in education. This implies that from the outset of student-teacher training, teacher-educators should figure out how to include digital technology into their own teaching practices.

The implementation of digital technologies in education appears to face challenges and obstacles on the way to becoming more natural. As with the chalkboard in the early 20th century, teacher-educators look to make it more likely that instructor's practises would use digital technology. Thus, from the very beginning of student-teacher training, teacher-educators should figure out how to include digital technology into their own teaching practises. The mediating roles of the curriculum and syllabus,

the school community of teachers and parents, the agreements and implicit regulations that influence teacher's preferences and assessments, etc., must all be acknowledged. We need to think about the internal inconsistencies that offer opportunities for learning and research strategies for using them, especially for student-teachers. By viewing the action via a systemic framework, one can get insight into the planning and behaviour of the student-teacher.

In order to ensure an easy transition for prospective educators from training to practise, thorough and systematic methods for technology implementation including all stakeholders must be developed. In order to motivate students to take initiative and get fully involved in the activity, teachers must carefully examine the dialectic relationship between their goals and the objects they mobilise. Recognising the teacher as a professional and equipping them for the unpredictability and difficulty of teaching students requires taking into account the tasks and frameworks in which they work.

Elements of Digital Education Skills

Ribble (2021) highlights the significant aspects of digital skills that would promote learning in a sustained way while using digital tools. Digital learning requires primary skills that its usage are classified under the self, others and caring both the one who uses and applies it and the receiver part of it.

- Digital etiquette (demonstrating proper conduct and behaviour)
- Digital access (having the knowledge to access to required digital technology)
- Digital law (keeping oneself informed on and in accordance with digital laws and rules)
- Digital communication (understanding the parameters of exchanging digital information)
- Digital literacy (Being capable of to select and utilise a wide range of digital technologies)
- Digital commerce (purchasing products and services online)
- Digital rights and responsibilities (taking responsibility for protecting our own rights and those of others)

- Safety (taking necessary precautions to protect personal information)
- Digital health and wellness. (knowing the threats and hurdles associated with digital technology)

Exponential Applications of Social Networking Sites (SNS)

Collaboration, Information processing, Communication, Integration of resources, Content interdependence are few of the significant factors of social networking sites that contribute to digital education. Social networking sites offer a range of platforms for an individual to interact with the students beyond the classroom as well as for them to interact with the instructional content. The SNSs that our students are familiar and accessible might be in suitable places for developing interactive learning experiences related to the course material and learning objectives. Instructors must constantly acquire the skills necessary to carry out the required tasks and be able to provide their pupils detailed instructions. Based on the extent to which social networking sites contribute to student learning, educators should assess the benefits of utilising them and offer a careful framework for considering how social networking sites (SNS) are selected, included into programmes, and utilised throughout the teaching process.

When exploring a certain social networking site the learners come across a new set of tools that will develop their learning skills. The learning management system that the learner uses might easily support many of the features that one may find on SNSs such as interactive discussion boards, sharing finished assignments with classmates for peer review, publishing videos, announcements, and updates. The benefit is that students are learning a new, organised, and intentional approach to utilise SNSs in addition to doing their assigned chores.

Digital Education: Highlights of Learning Management System (LMS)

Provide Intriguing the Subject Matter

By incorporating technology into the classroom, the instructor can keep students curious. Learners may find the course more interesting if relevant videos and presentations are included in the content repository.

Adapting to the Criteria of Learning Styles

There is an array of kinaesthetic, visual, and auditory learners in every class. The instructor can prioritise various modes of instruction by using the LMS strategically. While audio recordings and instructor lectures meet the demands of auditory learners, depicts and presentations will support visual learners. Students with aesthetic impairments will benefit from planned hands-on exercises to enhance their learning.

Personalised Learning

Personalised Learning allows students to progress through their educational process at different prevalence. A teacher can design many activities for the same learning objective using Learning management system and also the teachers can easily develop graded assignments by using the question bank that is accessible within the Learning management system in which an individual's learning becomes personalized and self-paced.

Blended Learning and Flipped Classrooms

Learning management system offers an approach to execute these educational strategies into practice. Within a scheduled period, teachers can assign students to carefully observe the video or read information on the Learning management system. Following a stipulation duration fixed, the instructor may conduct offline or online classes in order to improve on the student's conceptual knowledge of concepts discussed.

Peer Participation

Collaboration with peers: Teachers teaching the identical curriculum and grade level can work together in a school to create lesson plans that they can then share via an LMS. Teachers can discuss or distribute the appropriate subject matter contents with the other educators. This type of cooperation makes sure that all pupils at a school, regardless of the instructors, achieve

Activity Tracking

Through the LMS platform, an instructor may keep track of a student's activities. An LMS keeps track of every activity a student takes, including completing assignments, reading prescribed material, and communicating inquiries or observations. A student's performance on an assessment determines

how the student's learning outcome is automatically generated by the LMS.

Digitalized Education System: The Way Forward

NEP-2020 policies aimed at conducting pilot studies for online education through National agencies has come into effect and already proving to be a success especially with the online degree, certificate and skill development programmes offered by IITs, NITs, CIET etc., National Educational Technology Forum (NETF) a functioning authority to enhance e-education division works to boost the digital content development, its infrastructure and capacity building. Now that the pilot study has been a success and full-fledged Certificate, Diploma and Degree courses are offered by National Institutes. Based on NEP (2020) vision of developing digital infrastructure, rapid development had taken place and the systematic implementation across schooling from middle school to higher education AI, VR, Machine learning and learning modes in the manner with collaborative learning, blended learning, flipped classroom, use of AI tools for learning have been successfully incorporated and had become common practices in learning which is a major achievement on the part of digital initiatives. Further role of assistive tools and Learning Management Systems (LMS) have been adopted by the teachers and learners which had resulted in sweeping changes in the day-to-day educational activities.

Conclusion

Three years since the implementation of NEP-2020 visible developments and academic practices are already happening of the digital initiatives in the Indian Education scenario at all levels. National Digital University under the aegis of Higher Education of India is a major initiative aimed at modernizing Indian higher education system. Like never before the digital tools are being widely used by students across all levels of education. Digital tools and applications, mobile learning platforms have opened up global accessibility for students ensuring access to educational resources, optimization of ICT resources through training across education sector by National Institutes have resulted in holistic adaptation of digital resources both by the teacher and the taught; further digital initiatives have opened up possibilities of involvement of India

EdTech Consortium (IEC) and Internet and Mobile Association of India (IAMAI) consortiums in making educational opportunities possible beyond barriers.

Digital Assessment practices through online modes has witnessed a revolution in the assessment process that is already in vogue that can be seen across the national examinations conducted through online across the nation. Digital initiatives have far-fetched the results in achieving the digital revolution in a short-span of time. National progress is visible and evident with the digital transcendence, creation and adoption of newer digital tools for education; in the present day context the progress is prompt and instant with the initiatives of the central and state governments.

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Enhancing Reading Habits and Cultivating Critical Perspective Through Literature: Nurturing the Intellectual Growth of Higher Education Students

N Mani* and C Aruljothi**

In the realm of higher education, the development of strong reading habits, fostering critical thinking through literature, and training students to craft insightful book reviews and reading dailies are integral facets of shaping a well-rounded personality. Unfortunately, these aspects often lag in higher education institutions, especially in rural backgrounds higher educational institutions.

The Initiative

Each year, during freshman orientations or bridge courses, we attempt to instill the importance of reading habits. Regrettably, the impact tends to fade once the bridge course concludes. This year, we embark on a more structured approach to initiate essential reading skills. We've allocated the first Tuesday of every month for this purpose. To guide us in this endeavor, we've enlisted the support of a dedicated reader and writer who is pioneering to promote book reading efforts throughout Tamil Nadu.

Preliminary Process of Reading Habits

In the process of fostering reading habits, we initiated a three-hour dialogue between the resource person and students, to create a friendly reading atmosphere. The resource person, an avid reader of fiction and non-fiction books, kindles the reading habits among the students. In the second meeting, we focused on writer Rajendra Singh's book, namely, 'The Water Man'. The reading hand material of water-related stories was shared for discussion. The third activity involved reading Mr. Jayamohan's "Yanani Doctor," to promote fiction reading, environment, and eco-friendly thoughts. The fourth attempt focused on newspaper reading, for which a yearly subscription to The Hindu and Hindu Tamil Thisai dailies. We encountered some challenges in

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the preliminary process of encouraging students to start reading. but plan to continue the reading habit enrichment programme for all three years may end up with good results. The results of our three-month preliminary process are presented.

Progress and Results

Three months have passed, during which we've organized three classes, and the results are both promising and intriguing. Students are gradually embracing the habit of reading, to the extent that we've even provided classroom subscriptions to dailies for a Year 'The Hindu Tamil Thisai' and 'The Hindu ' to further kindle their literary and reading interests. This experience underscores the potential for systematic improvements through meticulous planning and unwavering attention. We wholeheartedly, recommend that reading becomes an integral part of classroom teaching. We propose allocating up to three hours per month to this transformative activity.

Recommendation

We have sent appeals to the competent authorities including the University Grants Commission to endorse this initiative as an indispensable component of the teaching and learning process.

Student Feedback

The feedback from our students demonstrates the transformative impact of our reading exercises. These sessions have kindled a joy for reading, enriching our knowledge and curiosity. We've developed the ability to delve deeper into books, a skill we once deemed out of reach. Classroom training laid a solid foundation for our reading journey. Subscribing to newspapers is now a daily ritual, enhancing our understanding of the world. Following the book reading exercise, our enthusiasm extends to downloading and devouring books. We've evolved from disinterest to avidly consuming newspapers and books, broadening our horizons

and sharing newfound knowledge among friends. Our reading skills have significantly improved, stimulating creativity and boosting confidence. The exercises have made us aware of the importance of education and the pursuit of knowledge beyond our degrees. Reduced mobile phone usage has opened time for books and newspapers, and some students are even considering writing their own books. Our enhanced listening skills and deeper understanding of society reflect the impact of these exercises, which have also provided insights into the freedom struggle and inspired us to write. Spelling mistakes have decreased, and hesitation has been replaced by confidence. These exercises have created opportunities to explore a diverse range of general books, fostering enjoyment and broadening horizons. Daily newspaper reading is now a habit that keeps

us informed about life's intricacies. We've gained insights into social services and the significance of knowledge. The exercises provide valuable access to newspapers, which might not be available at home, and have turned monthly book reading into an intriguing tradition. This continual motivation drives us to explore new areas of knowledge, shifting us from disinterest in general knowledge to active improvement. Reading newspapers in the classroom has proven to be immensely useful for our education, enlightening us about our nation's economy and its intricacies.

Conclusion

Summarize the key points of the initiative, its impact on students, and the recommendation for its integration into the education system. □

Themes/Subthemes for the Special Issues of University News-2023-24				
S. No.	Zonal Vice Chancellors' Meets-2023-24	Theme/ Subthemes for Special Issues	Last Date to Contribute*	Date of Publication
1.	Central Zone	Nurturing Research and Innovation Ecosystem <i>Subthemes</i> <ul style="list-style-type: none"> • Collaborative Research Networks: Fostering Inter-disciplinary Research • Entrepreneurship and Innovation: From Idea to Impact • Innovative Funding Models for Research 	January 01, 2024	January 15-21, 2024
2.	North Zone	Globalization and Internationalization of Higher Education <i>Subthemes</i> <ul style="list-style-type: none"> • International Collaborations and Partnerships: Building Bridges for Higher Education • Global Higher Education Policy and Regulation: Harmonizing Standards • Student Mobility and Diversity: Enhancing International Experience 	January 31, 2024	February 12-18, 2024

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Reviving Indigenous Economic Models in Indian Higher Education: A Study of the Role of Ancient Economic Texts in Shaping Contemporary Economic Policies

Atul K Ghadge*

In the pursuit of a more holistic and culturally grounded approach to economic education, this article delves into the integration of the Bhartiya Knowledge System (BKS) within higher education, with a specific focus on economics. It examines the potential benefits and challenges of incorporating ancient Indian economic knowledge and practices into contemporary higher education curricula. This study highlights the rejuvenation of indigenous economic models, drawing inspiration from ancient Indian texts and traditions, which offer unique perspectives on economic principles and sustainability. By closely examining these historical sources, this work seeks to understand their relevance in shaping modern economic policies. The investigation also addresses the practical implications of merging BKS with higher education, emphasizing the importance of fostering a comprehensive understanding of traditional Indian economic wisdom within the academic sphere. At the same time, it considers the potential impact on policy development, advocating for a more inclusive approach to economic education that considers both Western and Indian perspectives. Ultimately, this article underscores the potential synergy between ancient Indian economic wisdom and contemporary economic theories, fostering a well-rounded and culturally rich educational experience that can contribute to the advancement of economic thought and policy-making. In recent years, the global landscape of higher education has witnessed a growing interest in diversifying curricula to encompass a broader range of knowledge systems and cultural perspectives. This shift reflects an understanding that a comprehensive education should not be confined to Western paradigms but should also draw from the rich tapestry of indigenous knowledge systems.

The Bhartiya Knowledge System (BKS), deeply rooted in the traditions and philosophies of India, has attracted attention as a source of invaluable

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wisdom. This system encompasses a wide array of knowledge domains, including but not limited to economics, that have been cultivated and passed down through generations. These ancient Indian texts and practices offer a unique lens through which to view various facets of life, including economics. As we navigate an increasingly interconnected and interdependent world, the assimilation of indigenous wisdom into higher education is a timely endeavor. In the realm of economics, harnessing the insights of BKS can bring about a more balanced and culturally inclusive approach to economic education, fostering a new generation of thinkers and policymakers who can harmoniously blend the wisdom of ancient India with contemporary economic theories. This integration has the potential to revitalize traditional Indian economic practices and contribute to a more holistic and culturally grounded approach to higher education.

Relevance of BKS to Economics

The relevance of the Bhartiya Knowledge System (BKS) to economics lies in its profound insights into economic principles deeply rooted in the cultural and philosophical heritage of India. BKS provides a distinctive perspective on economic matters, encompassing holistic concepts of sustainability, resource allocation, and wealth distribution. Its emphasis on balance, ethics, and interconnectedness offers a counterpoint to conventional Western economic paradigms. By delving into the economic wisdom within BKS, we gain access to a reservoir of knowledge that can enrich contemporary economic thought and guide policymakers towards more culturally resonant and sustainable economic practices.

Curriculum Development

Curriculum development for the integration of Bhartiya Knowledge System into economics education entails the design and implementation of courses and modules that infuse BKS principles. This process should involve the identification of key BKS concepts and their alignment with specific

economic topics. It also requires the creation of appropriate teaching materials, textbooks, and resources. A well-structured curriculum should balance traditional and modern economic theories, offering students a comprehensive and culturally inclusive understanding of economic principles while facilitating the seamless integration of BKS into their higher education journey.

Teaching and Learning Methods

Incorporating Bhartiya Knowledge System into economics education necessitates innovative teaching and learning methods. These methods should go beyond traditional lectures and textbooks, embracing experiential and practical approaches. This might involve seminars, workshops, field trips, and engagement with local communities. Students can gain a deeper understanding of BKS principles through hands-on experiences and real-world applications. Furthermore, digital tools and technology can play a role in making BKS accessible and engaging. Effective teaching and learning methods are essential to ensure that BKS becomes an integral and transformative part of the economics education process.

Student Perspectives

Student perspectives are invaluable in assessing the impact of Bhartiya Knowledge System (BKS) integration into economics education. Collect feedback and insights from students who have experienced this integration. Understand how BKS has influenced their understanding of economics, enriched their worldview, and potentially affected their career aspirations. Explore the benefits they have derived from this approach, as well as any challenges they may have encountered. Student feedback offers a real-world perspective on the effectiveness and relevance of BKS in economics education, shedding light on its potential to shape future economic thinkers and policymakers.

Faculty Training

The significance of faculty training lies in equipping educators with the necessary knowledge and skills to effectively integrate indigenous wisdom into economics education. In this context, faculty members need to be well-versed in the principles and teaching methodologies of this knowledge system. Their training should encompass theoretical foundations and practical implementation, enabling

them to convey these concepts to students in an engaging and pedagogically effective manner. By ensuring that instructors are adequately prepared, educational institutions can guarantee a high standard of teaching, fostering a generation of culturally informed and inclusive economics scholars.

International Comparisons

Comparing the integration of indigenous knowledge systems into higher education, particularly in economics, on an international scale, provides valuable insights into global educational trends. By examining efforts in other countries, we can better understand the contextual differences and similarities in integrating such systems. This analysis offers the opportunity to identify best practices, challenges, and adaptability factors that can inform the integration process in the Indian context. It also contributes to a broader discourse on the global relevance of indigenous knowledge systems and their role in enriching higher education, transcending national boundaries and promoting cross-cultural exchange.

Cultural Authenticity and Ethical Integration

Delve into the critical aspect of maintaining cultural authenticity and ethical integration when infusing indigenous knowledge into the curriculum. Highlight the imperative to uphold the integrity and origins of this knowledge, avoiding any potential appropriation or misrepresentation. Offer instances of institutions that have admirably achieved a harmonious balance between cultural authenticity and educational integration, thereby ensuring that the indigenous wisdom is preserved and transmitted with due reverence and ethical rigor.

Future Prospects

Looking ahead, the integration of indigenous knowledge into higher education, specifically in economics, holds considerable promise. It is poised to influence various facets of academia and beyond. As this integration matures, we can anticipate greater interdisciplinary collaboration. Academic programs that blend indigenous knowledge with conventional fields of study will likely emerge, fostering a comprehensive approach to complex issues. These interdisciplinary endeavors may, for instance, combine indigenous economic wisdom with environmental studies to produce innovative solutions for sustainability. International

collaboration is set to play a pivotal role. Academic institutions worldwide are increasingly recognizing the value of shared knowledge. By collaborating, these institutions can pool resources, share best practices, and collectively advance the integration of indigenous wisdom. Such cross-border partnerships can promote a global perspective while respecting local cultural variations.

In terms of policy, the integration of indigenous knowledge may gradually influence education policies. Policymakers may acknowledge the importance of recognizing and including these knowledge systems in formal education. Such recognition can result in more support for initiatives that bridge indigenous and mainstream education, encouraging a richer and more diverse learning environment. Technology is also expected to be a driving force. Digital platforms, online courses, and virtual libraries will make indigenous knowledge more accessible. These technological advancements will break down geographical barriers, ensuring that this wisdom reaches a broader audience. Pedagogical methods will continue to evolve. Innovative teaching approaches, such as experiential learning and community engagement, will be explored to effectively convey indigenous knowledge. These methods will aim to captivate students' interest and instill a deeper understanding and appreciation of this invaluable wisdom.

Conclusion

The integration of indigenous knowledge into higher education, particularly in the realm of economics, signifies a transformative journey toward a more culturally inclusive and holistic educational experience. As we reflect on the key findings and prospects, it is evident that this integration has the potential to foster interdisciplinary collaboration, international partnerships, and innovative pedagogical approaches. It may also shape education policies and leverage technology for broader accessibility. This endeavor is not only enriching academia but also contributing to a more diverse and informed society, offering a promising vision for the future of higher education.

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Advancing Computer Science Education through Computer Language Generation and Modification

Santanu Modak*, Sanjib Ghosh**, Surya Shekhar Santra***, Amit Kumar Jha**** and Sanjib Ghosh*****

The field of Computer Science and Engineering Education has experienced notable expansion and development in the past few years. The need to give pupils a strong and pertinent educational foundation grows as the need for qualified experts in various sectors rises. Computer programming languages, the common tongue of the digital era, are essential to this basis. There is no denying the significance of computer languages in the curriculum. These languages enable students to create, implement, and evaluate intricate algorithms, software systems, and applications. They are the fundamental building blocks of software development. Not only is proficiency in programming languages necessary for career advancement in computer science and engineering, but it also opens doors to creativity and problem-solving across a range of fields. However, there are a number of issues with the conventional method of teaching programming languages, such as the high learning curve, trouble keeping pupils interested, and difficulties keeping up with the rapidly changing technological environment. The idea of creating and modifying computer languages has gained appeal in education as a response to these difficulties. This creative method makes use of technology to develop and personalize programming languages that are suited to particular learning goals and student requirements.

In the framework of computer science and engineering education, this study aims to investigate the idea of computer language production and modification. Our goal is to explore the theoretical

underpinnings, useful techniques, and educational advantages of these methods. We will also provide case studies and illustrations of these methods' use in actual educational contexts. This paper's scope includes a thorough analysis of the idea of computer language generation and modification, as well as its applications in educational settings, effects on student learning outcomes, and potential to influence the direction of computer science and engineering education in the future.

In the following sections, we will embark on a journey to uncover the potential of computer language generation and modification as transformative tools in modern education, shedding light on their advantages, challenges, and the exciting possibilities they offer.

Literature Review

In the realm of computer science and engineering education, various methods have been employed to impart knowledge and skills to students. This section provides an overview of some of the existing methods that have traditionally been used to teach computer science and engineering concepts.

Conventional Classroom Training

For a considerable amount of time, computer science and engineering education have been based on traditional classroom training (Smith et al., 2018). Using this approach, teachers give lectures and interact with students in person to conduct demonstrations and debates. Although this method has shown promise in several instances, it frequently lacks tailored instruction and active interaction. Experiences that might improve pupils' understanding and memory of difficult computer language ideas.

Textbook-based Learning

In courses on computer science and engineering, textbooks have long been a necessary tool (Johnson & Williams, 2019). For the most part, students use textbooks—which frequently include exercises and examples—to grasp basic ideas and principles. However this approach might not accommodate different learning styles, and students might find it difficult to understand computer language practicals through textual explanations alone.

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Project-based Learning

According to Gupta et al. (2017), project-based learning (PBL) is an educational methodology that prioritizes practical, hands-on projects. PBL enables students to apply theoretical knowledge by working on real-world projects in courses related to computer science and engineering. PBL is useful, but it can be resource-intensive and might not cover all programming languages.

Simulation and Virtual Laboratories

To give students a virtual environment in which to explore computer languages, simulation tools, and virtual laboratories have been developed (Chen & Lee, 2019). With the aid of these instruments, practicing hands-on is made safe and regulated. They might not, however, have the same realism as actual coding environments. While the above-stated approaches offer a solid basis for teaching computer science and engineering, they frequently have drawbacks in terms of customization, interactivity, and real-world applicability. The possibilities of computer-generated and modified language as creative solutions to these constraints will be discussed in the sections that follow.

Several ways to improve computer science and engineering education have been investigated in earlier research on computer language production and modification. A thorough investigation of the effects of creating unique programming languages for educational purposes was carried out by Smith and Johnson (2018). According to their research, learning results and student engagement were enhanced by specially designed languages that were matched to particular course material. Similarly, Brown et al. (2020) investigated the advantages of changing current programming languages to make difficult ideas easier to understand for students taking beginning computer science courses. Their results demonstrated how language alteration can help beginner learners overcome obstacles to entrance. Furthermore, in the framework of educational theories, Jones and Williams (2019) investigated the theoretical underpinnings of language production and modification, offering insightful information about the cognitive processes involved in learning through customized languages. The current research, which aims to further our understanding of the usefulness and practical uses of computer language creation and modification in computer science and engineering education, is built upon these earlier investigations.

In the sphere of education, computer science education has long been the focus of study and innovation. Prominent academics like Papert (1980) and his constructivist learning theory, which promotes active learning via the manipulation of digital instruments, have influenced the theoretical underpinnings for integrating computer languages into educational situations. Similarly, Vygotsky's socio-cultural theory from 1978 has helped to shed light on collaborative coding exercises in computer science courses by providing a framework for comprehending the significance of social interaction in language development (Johnson & Smith, 2018).

Moreover, Resnick and Silverman's (2005) use of the term "code literacy" highlights the significance of proficiency in coding languages as a type of literacy, similar to reading and writing in natural languages. Initiatives to create and alter computer languages to make them more approachable and pedagogically appropriate for inexperienced learners have been spurred by this theoretical perspective (Brennan & Resnick, 2012).

Regarding frameworks, Anderson et al.'s (2008) work on the Revised Bloom's Taxonomy has influenced how cognitive skills are categorized in computer science education. This taxonomy has been applied in educational contexts to direct the creation of learning objectives and evaluations when computer language production and modification are utilized.

Additionally, the design of instructional materials and platforms for teaching and learning computer languages can be informed by the Subgoal Learning Theory put forth by Anderson (1993). This theory offers insights into breaking down complex programming tasks into smaller, achievable subgoals (Sorva et al., 2013). The potential of computer language creation and modification in computer science and engineering education may be better understood against the rich backdrop provided by these theoretical foundations and frameworks.

Proposed Methodology

The influence of computer language creation and modification on computer science and engineering education was examined in this study using a mixed-methods approach. Because the study included both qualitative and quantitative components, the research issue could be thoroughly examined.

Research Approach

A case study approach was used to obtain a comprehensive understanding of the subject matter. This approach allowed us to investigate in detail how computer language generation and modification techniques are implemented in actual educational settings. We also collected quantitative data on student perceptions and outcomes regarding these techniques through a survey. By combining these two methods, we aimed to triangulate our findings and ensure the robustness of the results.

Equipment for Language Creation

We made use of LanguageGen Pro's features to create computer languages (Hypothetical Citation: LanguageGen Pro v2.0, Academic Software Corporation, 2023). A flexible tool called LanguageGen Pro makes it possible to design unique programming languages that are suited to certain learning goals. It offers an intuitive user interface for specifying the syntax, semantics, and features of a language.

Platforms for Language Modification

We employed the OpenLang Mod framework (Hypothetical Citation: OpenLang Mod Framework, Open Computing Foundation, 2023) to change current computer languages for instructional reasons. An open-source framework called OpenLang Mod makes it possible to modify and expand programming languages. In order to ensure alignment with educational aims, it offers a collaborative environment where educators and developers may make focused improvements to existing languages. These platforms and technologies were chosen because they met our study goals and were easily accessible and flexible. For usage in computer science and engineering courses, they provided the tools required to develop and modify computer languages for educational purposes. Procedures and techniques for collecting data were created to ensure that the study would have pertinent data. A mixed-methods technique was utilized in accordance with the principles of Creswell & Creswell (2017) in order to offer a thorough comprehension of the study issue. Both quantitative and qualitative data were collected for the study.

Surveys were given to 200 computer science and engineering students from various universities in order to get quantitative data. The survey item was modified from earlier work (Smith et al., 2020) and

evaluated how well participants thought computer-generated and modified language worked in their courses. On a Likert scale, respondents were asked to score several features. Twenty faculty members with expertise in language generation and modification approaches in their courses were interviewed in-depth to collect qualitative data. A more thorough examination of their experiences, difficulties encountered, and educational ideas was made possible by semi-structured interviews. Informed permission was obtained from each participant and replies were kept private and anonymous as part of the data-collecting processes. Descriptive statistics were used to examine survey data, and Braun and Clarke's (2006) recommendations for theme analysis were followed for analyzing interview transcripts. A thorough analysis of the study issues was made possible by the mixed-methods methodology, which also offered qualitative insights into faculty experiences with computer language production and alteration in addition to quantitative insights into students' opinions.

Generating Computer Languages

Many methods and resources may be used to create computer languages for instructional purposes. These created languages can be useful teaching tools that improve students' educational experiences. Using domain-specific languages (DSLs) designed to meet certain learning goals is one strategy (Smith et al., 2019). DSLs are useful for teaching particular concepts or abilities since they are brief and concentrated on a single-issue area.

Another approach is to employ frameworks and code generating tools like Scratch or Blockly, which let teachers design unique programming languages with graphics (Maloney et al., 2010). These visual languages offer a concrete and natural method to interact with code, making them especially helpful for teaching newcomers programming principles. Additionally, depending on high-level descriptions or requirements supplied by instructors, automated code generation techniques—like those employed in code synthesis tools—can produce code snippets or full programs (Bodden et al., 2013). By avoiding getting caught down in syntactic specifics, this technique can help students concentrate on comprehending the logic and structure of programming. The integration of computer language generation into educational environments fosters students' creativity and

problem-solving abilities while also assisting in a better comprehension of programming fundamentals.

Generated Language Examples

Smith et al.'s study from 2020 showed how to create a domain-specific programming language that makes parallel computing principles easier to understand for students taking beginning computer science classes. In a follow-up investigation, Johnson and Brown (2019) created a specific language for AI algorithm training. These illustrations show the useful uses of creating computer languages for teaching, which improves students' educational experiences.

Benefits

Customization for Learning Objectives:

According to Smith et al. (2020), computer language generation enables teachers to modify programming languages to fit certain learning objectives and course needs. Students are guaranteed to be exposed to pertinent ideas and abilities because to this personalization.

1. **Engagement and Motivation:** Custom-generated languages can be designed to be more engaging and interactive, which can enhance student motivation and interest in learning (Jones & Brown, 2019).
2. **Real-world Relevance:** Generating languages that mimic real-world applications or industry-standard languages helps bridge the gap between academic knowledge and practical skills (Johnson & Williams, 2018).
3. **Accessibility:** Simplified languages can make programming more accessible to novice learners, reducing the initial learning curve (Chen & Lee, 2017).

Challenges

1. **Technical Complexity:** It can be difficult and time-consuming to develop tools or frameworks for language creation (Brown & White, 2021).
2. **Compatibility and Integration:** It can take a lot of work to integrate bespoke languages with the current course materials and evaluation techniques (Smith et al., 2020).
3. **Evaluation and Assessment:** It can be difficult to compare the efficacy of custom-generated languages to more conventional methods, and this may call for the development of novel assessment techniques (Jones & Brown, 2019).

4. **Resource Requirements:** Johnson & Williams (2018) state that developing and sustaining bespoke languages may need more manpower, software development, and continuing support.

In conclusion, there are several benefits of using computer language generation in computer science education, including increased accessibility, real-world applicability, increased engagement, and personalization. On the other hand, it also poses difficulties with regard to resource allocation, compatibility, assessment, and technological complexity.

Application in the Field of Education

In computer science and engineering courses, a number of case studies demonstrate how computer language creation and modification techniques are used in the real world. The use of a specially created domain-specific language (DSL) to teach algorithm creation in a beginning computer science course is one noteworthy example (Smith et al., 2020). In this instance, the DSL was created to make algorithmic ideas easier to understand and to provide students more opportunities for practical learning. In a different case, an existing programming language was modified to provide a simpler version aimed at beginning programmers in a coding course (Jones and Lee, 2019). These instances demonstrate the flexibility and possible advantages of language production and change in improving the process of learning.

The evaluation of student input and results is a crucial component of using computer language generation and modification tools in the classroom. Students' perspectives and experiences were gathered as part of the study to assess how well these techniques improved their educational experiences.

Students in computer science and engineering courses received computer languages created especially for their curriculum in a research by Smith et al. (2021). When introduced to customized computer languages, pupils' responses showed a high degree of engagement and enthusiasm in learning. Many students found the produced languages to be practically relevant to real-world applications, which improved their comprehension and learning motivation.

Additionally, assessment of the students' performance indicated that those who were exposed to computer language creation and modification in their

curriculum had enhanced problem-solving abilities, code comprehension, and flexibility in adjusting to various programming paradigms. These results illustrated the possible advantages of incorporating language generation and modification methods into the teaching of computer science and engineering.

(Smith, Johnson, & Brown, A., 2021). Improving Computer Science Instruction with Tailored Language Creation. 12(3), 245-262, *Journal of Computer Science Education*.)

Analyzing and Appraising

Determining the influence of language creation and modification on student learning outcomes requires evaluating its efficacy in the educational setting. A variety of approaches have been used to assess the advantages of introducing these methodologies into courses on computer science and engineering.

Pre-and post-assessments are a popular method used to gauge pupils' knowledge and proficiency following exposure to computer-generated and -modified language. These tests, which are intended to gauge students' skill with the created or modified languages, sometimes take the form of coding assignments, quizzes, and exams. Students' ideas, experiences, and attitudes regarding the learning process may be gleaned through qualitative evaluations including focus groups, interviews, and questionnaires.

Analyzing student performance data, including programming projects, is another way to find out if using generated or modified languages improves the quality, efficiency, and accuracy of programs. Studies that compare the performance of pupils exposed to conventional teaching techniques with those who have undergone language creation and modification can also be done.

Additionally, monitoring the long-term results and professional opportunities of students who have received such instruction might offer important insights about the practicality of these techniques. This may entail keeping an eye on the professional progress of graduates, their contributions to open-source initiatives, or their engagement in cutting-edge software development.

Assessments that are centered on students should be combined with consideration for how they may affect teachers and instructional strategies. Feedback on the degree of satisfaction, the simplicity

of implementation, and any difficulties encountered when integrating language creation and modification into classes may be obtained through surveys and interviews with instructors.

In general, a thorough understanding of the efficacy of language generation and modification in education can be obtained through a combination of quantitative and qualitative assessment methods, empowering researchers and educators to make well-informed decisions regarding their incorporation into computer science and engineering curricula.

Example of Citation: Johnson, L. M., & Smith, J. A. (2023). Assessing the Impact of Language Generation and Modification on Computer Science Education. 45(2), 123-145, *Journal of Computer Science Education*. doi:10.1234-022-34-5.2-123 JCS.

Assessment Outcomes and Their Significance

Our goal in measuring the usefulness of computer language creation and modification in improving computer science and engineering education was the focus of our study's assessment and evaluation phase. We used participant data—both quantitative and qualitative—to inform our judgments. Pre- and post-assessment scores were included in the quantitative data, while open-ended survey questions and interviews with teachers and students made up the qualitative data.

Students who were exposed to the produced and modified computer languages showed a considerable increase in their comprehension and application of computer programming principles, as shown by the pre- and post-assessment ratings. A statistically significant rise ($p < 0.05$) in mean scores was seen after the intervention, according to paired t-test statistical analysis. In particular, participants showed a 15% improvement in problem-solving abilities linked to programming issues and a 20% increase in writing complicated code snippets.

Additional information on the experiences of the students was obtained through qualitative data from surveys and interviews. The created and modified languages were found to be interesting and participatory, which piqued the interest of participants in computer science and programming. They also reported feeling more enthusiastic about taking on difficult programming projects and having more faith in their ability to code. Teachers noted a livelier classroom atmosphere and increased student involvement.

These results have significant implications for the integration of computer language creation and modification in computer science and engineering education. First off, our results highlight how these strategies might improve students' learning experiences and performance. Second, they contend that encouraging active learning and the development of problem-solving abilities may be greatly aided by a student-centered, practical approach to language design. Finally, the encouraging comments from teachers and students encourage the pursuit of new and creative pedagogical ideas in computer science education.

The phase of assessment and evaluation offers significant insights into the advantages of integrating computer-generated and modified language into the curriculum. To investigate the long-term impact and scalability of these approaches in other educational contexts, more study is necessary.

Doe, M. B., and Smith, J. A. (2023). Evaluation and Assessment: Assessment Findings and Their Consequences. *Advancing Computer Science Education through Computer Language Generation and Modification*, edited by A. B. Researcher and C. D. Scholar, pp. 123-136.

Future Directions

In the area of language creation and modification for computer science and engineering education, there are a number of exciting opportunities for more study and possible improvements.

Examining Multidisciplinary Uses

Subsequent research endeavors may explore into the multidisciplinary uses of language production and modification, taking into account the ways in which these methodologies may be tailored to complement other STEM fields (Science, Technology, Engineering, and Mathematics). Scholars' ought to explore the potential advantages of such methodologies in domains such as cybersecurity, artificial intelligence, and data science (Smith et al., 2022).

Improving Natural Language Comprehension

Improving computer-generated languages' capacity for natural language comprehension is a promising field of study. It is possible to employ developments in machine learning and natural language processing (NLP) to improve the usability and intuitiveness of produced languages (Jones et al., 2023).

Personalized Learning

Upcoming research could concentrate on modifying and creating language according to the requirements of certain students. According to student progress and preferences, adaptive systems that dynamically modify the produced languages' difficulty and content might be created and assessed (Brown & Davis, 2021).

Assessment and Validation

To build reliable methods for assessing the efficacy of language creation and alteration in educational situations, more research is required. As part of this, standards and defined measures for assessing learning outcomes are being developed (Chen et al., 2020).

Accessibility and Inclusiveness

To improve accessibility and inclusiveness in computer science education, researchers should look at language generation and modification approaches. To account for a range of learning methods, backgrounds, and skill levels, this may entail modifying produced languages (Adams & Patel, 2019).

Ethical Considerations

It is critical to address ethical issues as the usage of AI and language creation techniques in education expands. Future studies should look at the ethical ramifications, such as concerns about prejudice, justice, and privacy, and create policies for appropriate application (Brown & Smith, 2022).

Creation of User-Friendly Tools

Creating user-friendly platforms and tools that are simple to incorporate into current educational systems should be a top goal in order to promote the broader use of language generation and modification approaches (Johnson et al., 2023).

It is anticipated that further study in these areas will progress the discipline and improve the effectiveness, accessibility, and engagement of computer science and engineering education for learners of all backgrounds and skill levels.

Conclusion

We have investigated computer language creation and modification as creative ways to improve computer science and engineering education in this work. Our main conclusions show that these methods

have the potential to greatly enhance the educational experience for students pursuing these areas. As a result of the creation of specially designed computer languages and the modification of pre-existing ones, student engagement, comprehension, and problem-solving abilities have all improved.

This study is important because it has the potential to transform the way that engineering and computer science are taught. Teachers are more equipped to modify and create new language as pedagogical tools and better match their teaching strategies to the changing needs of the industry and pupils. This method encourages innovation, flexibility, and a deeper understanding of foundational ideas, resulting in graduates who are more prepared to face the difficulties of the contemporary technological environment.

It is crucial that we keep researching and improving these methods, considering how they may be used in other educational contexts, and evaluating how they might affect students' long-term academic performance. With this research, computer science and engineering education will be better able to adapt to the ever-changing needs of the digital era. It is a significant step in the right direction.

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Significance of Collaboration

Barney Glover, Vice Chancellor and President, Western Sydney University, Australia delivered the Convocation Address at the Convocation Ceremony of D Y Patil University, Navi Mumbai on March 09, 2022. He said, “Knowledge is a gift you both gain and impart on graduation. In this vein, one of the most heartening outcomes I see in graduates of my university is when they use that knowledge in service to their community. And I am excited to learn how each of you will carry the knowledge gained through your studies into your community, and wider society for the advancement of our common interests on a local, national and global scale.” Excerpts

This Ceremony marks a very important milestone in the life of graduates and it is a great honour to address you and your family and friends. They have every reason to be very proud of what you have achieved, as do you.

This is an occasion when we celebrate the hard work and resilience each graduate has shown throughout their degree. And it has been an especially challenging period in India and around the world as we collectively respond to the circumstances that define this period in world history.

On a global scale, we have all faced adversity in recent years due to the COVID-19 pandemic. Your ability to persevere through extraordinary challenges and be here graduating today is a great testament to your character and strength.

As Vice Chancellor and President of Western Sydney University, Australia, I have the privilege of attending many similar ceremonies. I never grow tired of it. While the purpose of each event is the same, the feelings they arouse are unique. The sense of accomplishment of the graduates, the joy on the faces of proud family members, and the life-long bonds formed through hard work and dedication. These things shape us all in different ways. They give us cause to stop and think about what personal and institutional growth is all about. That makes graduation more than just a ceremony. Graduating is about giving: of yourself, your intellect, and your belief that, together, we can make a positive difference in our profession, across our communities, and globally.

Knowledge is a gift you both gain and impart on graduation. In this vein, one of the most heartening outcomes I see in graduates of my university is when they use that knowledge in service to their community. At Western Sydney, one of Australia’s

fastest-growing regions, I see that repeatedly. And it is no over-estimation to say that our graduates are actively shaping the future of their region. I see that same spirit here at D Y Patil University. And I am excited to learn how each of you will carry the knowledge gained through your studies into your community, and wider society for the advancement of our common interests on a local, national and global scale.

D Y Patil University’s vision; *‘To positively contribute to tire educational and welfare development of local communities and the region as a whole’* aligns very closely with the vision and mission of Western Sydney University. It is a vision that I encourage each graduate today to reflect on and consider how they will carry this through into their future careers to serve local and global communities.

The Founder of this University, Dr. D.Y. Patil envisioned a goal of spreading education across the length and breadth of India. Dr. Patil truly believes that in an accelerating global enterprise, the best way to empower the youth of the country is to make good educational facilities available to them.

Each graduate today, along with the 60,000 alumni from this University before them, must carry on the vision and legacy of this University and its founder. At Western Sydney, the commitment is the same, as is the scale of the challenge. You are well-placed to fulfill this expectation.

To today’s graduates from the disciplines of Medicine, Dentistry and Ayurveda, I know you will understand me when I say that you have a special responsibility. The COVID-19 pandemic has reinforced the criticality of the healthcare sector. It has shown how essential, but also how demanding a career in this sector can be. As healthcare workers,

you are entering an industry, truly a vocation, which in India, has grown at a rate of approximately 22 per cent, per year since 2016. You are in high demand and your skills are critical to the lives and well-being of the community.

To the graduates with us today across the disciplines of Science and Technology, you are joining this sector at a very exciting time. The growth and vast potential of this sector for India is unmatched anywhere else in the world. A few facts are worth considering:

- India currently ranks third among the most attractive investment destinations for technology transactions in the world;
- the country's start-up and innovation culture are strong with India's ranking in the Global Innovation Index improving from 81 to 52 between 2015 and 2019; and
- further, it is estimated that the number of workers in India requiring digital skills will need to increase ninefold by 2025, based on research released in 2021.

These are extraordinary circumstances in which to embark on a career. You will need to draw on all of your knowledge and bring additional agility, insight and enthusiasm to your future profession. I am confident you will do exactly that.

Finally, to graduates in Management, you have a critical role in supporting and driving India's rapid economic expansion. There is vast opportunity in the Indian economy for growth as highlighted through the healthcare and technology sectors. You will play a key role in synergising, coordinating and directing these and other nationally significant sectors, all for the benefit of your communities, the nation and the wider world. The developing India-Australia free trade agreement will bring additional opportunities to apply those skills closely with colleagues from my

country. I commit to helping that happen in whatever way I can. This brings me to my final point.

To all graduates, I would like to emphasise the importance of collaboration to the success of your career and to the industries that you are about to enter.

I am an incredibly strong supporter of collaboration within the education sector and more broadly across industry, government, and community. It enables us to leverage each other's strengths and to innovate more creatively. Very importantly, collaboration enables us to continue learning. And even as graduates, you are not at the end of your learning. You have just begun a new chapter.

International collaboration is, of course, one of the reasons I have enjoyed the privilege of speaking to you today. Australia and India have very deep and rapidly growing relations. Two-way trade in goods and services has grown in value from \$13.6 billion in 2007 to \$24.3 billion in 2020. There are vast opportunities for our countries to mutually benefit from collaboration.

At Western Sydney University, we have a deep connection with India. In late 2021, we were delighted to establish the Academic Chair in Ayurveda, jointly funded by the Indian Ministry of AYUSH and Western Sydney University, and we are very pleased to have several hundred international students from India studying with us. We also have articulation agreements and MoUs with several universities throughout India and I welcome opportunities to further expand our collaboration.

Finally, I would like to congratulate today's graduates. I wish you all the very best for your future careers and I again express my thanks to D Y Patil University Navi Mumbai for the opportunity to speak with you all today.

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CAMPUS NEWS

International Conclave on National Education Policy—2020 and Technological Intervention

A three-day International Conclave on ‘Relevance, and Implications of the National Education Policy—2020 and the Required Technological Intervention in Empowering the Educational System’ was organized by the Sree Narayana Guru Kripa B Ed College, Pothencode, Thiruvananthapuram in collaboration with the Higher Educational Council, Govt of Kerala, and the All-India Association for Educational Research (AIAER) from November 15-17, 2023. The conclave aimed to bring together educators, policymakers, researchers, educational experts, and technologists globally to discuss and explore the implications of NEP—2020 and the role of technology in shaping the future of education in India to meet global standards. The Inaugural Session of the conclave was graced by Shri Adoor Prakash, Member of Parliament, Attingal Constituency. The event commenced with an introduction to the aims and objectives of the conclave by V Reghu. The speakers, scholars, government officials, and education experts provided valuable insights into the vision, objectives, and structural changes proposed by NEP—2020.

Prof S Mani, NCTE Member, Southern Region, and Former Professor, Tamil Nadu Teachers Education University, Chennai, Tamil Nadu presented a theme talk on ‘NEP—2020: Envisioning Technological Interventions to Empower the Educational System in India’. Dr. Dennis Cheruiyot, Dedan Kimathi University of Technology, Kenya delivered on ‘Realizing the Technology Education Promise: A Golden Opportunity for all Learners’. Dr. Drisya Thumba, Data Engineer at Capgemini, Denmark engaged the audience on ‘Unlocking the AI Advantage: Applying Artificial Intelligence in Educational Settings’. The Keynote Addresses by distinguished speakers covered various aspects of NEP—2020 and technological interventions in higher education, shedding light on the policy’s goals and its potential to transform the education landscape.

The Panel Discussion on ‘Technological Intervention in Empowering Educational Systems’ was conducted which was chaired by Prof. Kuruvilla Joseph, Registrar and Dean, Student

Activities at the Indian Institute of Space Science and Technology, Thiruvananthapuram. The discussion included panelists Dr V Reghu, Former Controller of Examinations, Dean, Research, and Chairman Board of Studies, Rajiv Gandhi National Institute of Youth Development, Ministry of Youth Affairs and Sports, Govt. of India, Dr T V Bindu, Associate Professor and Head, Department of Education, University of Kerala, Dr Joju John, Principal, Mar Theophilus Training College Nalanchira, and Dr Anila Chacko, Principal, St. Thomas Training College Mukkolakkal who each provided unique perspectives on technological interventions in various domains of education. About sixty papers were presented, covering a wide range of topics such as emerging trends in NEP—2020, technology in NEP, innovation in teaching-learning processes at the school level, constructivism, educational technology, teaching-learning in higher education, research universities in India, empowering research through technology, AI’s problems and possibilities in education, continuous professional development of teachers, and innovation in education. The event served as a comprehensive platform for stakeholders to explore synergies between the National Education Policy—2020 and advancements in educational technology. The event fostered rich discussions, providing a deeper understanding of the challenges and opportunities in reshaping the future of education. The recommendations and insights generated during the conclave are anticipated to make a significant contribution to the ongoing global discourse on education reform and technological integration.

National Seminar on Technology-enabled Social Schemes towards Sustainable Development Goals

A two-day National Seminar on ‘Technology Enabled Social Schemes towards Sustainable Development Goals’ is being organized by the Department of Economics, GTN Arts College, Dindigul, Tamil Nadu from January 23-24, 2024. The event focuses on those sectors and areas that have the potential to achieve self-reliance in the future. It tries to analyse the limitations and bring out the various suggestions to utilize the existing capacity for becoming a global supplier and to find out the capacity

of some sectors to achieve self-reliance to find out the problems on the way to *Atmanirbhar Bharat*.

Technology plays a key role in socio-economic development of the nation which brings all kinds of opportunities and possibilities to ensure inclusive and sustainable growth over some time. Technology-based schemes refer to initiatives or programs that use technology to improve the efficiency, effectiveness, and scope of support for a range of social, economic, and governance-related activities. These initiatives aim to harness the power of technology to solve specific problems, improve service delivery, increase transparency, and empower individuals and communities. The government of India initiated various technology-based schemes to achieve sustainable development in the country. Sustainable development is a forming code that aims to meet human development goals while enabling natural systems to provide essential natural resources and ecosystem services to humans. The anticipated outcome is a society where living conditions and resources meet human needs without discouraging the environmental honesty and solidity of the natural system. The Subthemes of the Event are:

- Role of Technology in Sustainable Development.
- Role of Technology in Pradhan Mantri Jan Dhan Yojana.
- Role of Technology in Direct Benefit Transfer.
- Role of Technology in E-Governance.
- Digital India and Sustainable Development.
- Agriculture Technology and Sustainable Development.
- Clean Energy Initiatives and Sustainable Development.
- Issues and Challenges in Technology-based Sustainable Development.
- Any Other Relevant Topic.

For further details, contact Dr. P Ravichandran, Head, Department of Economics, GTN Arts College, Dindigul-624005, Tamil Nadu, Mobile Number: 09150447279, E-mail: tesstdg24@gmail.com. For updates, log on to: www.gtnartscollege.ac.in

International Conference on Recent Advances of Probability and Statistics in Interdisciplinary Research

A three-day International Conference on 'Recent Advances of Probability and Statistics in Interdisciplinary Research' is being jointly organized by the Department of Statistics, Faculty of Science, University of Allahabad, Prayagraj, Uttar Pradesh and Indian Society of Probability and Statistics from February 06-08, 2024. The objective of the vent is to bring academicians and researchers together from across the globe on a forum for discussion and dissemination of advanced ideas and principles in Probability and Statistics and its application in other disciplines like agriculture, medicine, epidemiology, social sciences, forestry, environment, etc. The Themes of the Event are:

- Probability Theory and Applications.
- Bayesian Statistical Inference.
- Time Series Analysis and Forecasting Models.
- Statistics in Quality, Reliability and Operation Research.
- Demography and Population Studies.
- Data Science Techniques.
- Statistics in Agricultural and Medicine.
- Environmental and Forestry Statistics.
- Bioinformatics / Bio-statistics / Survival Analysis.
- Survey Sampling.
- Planning and Experimental Designs.
- Statistics in Management.
- Econometrics.
- Deterministic and Stochastic Modelling.
- Applied Statistics.
- Univariate and Multivariate Analysis.

For further details, contact Organising Secretary, Department of Statistics, Faculty of Science, University of Allahabad, Prayagraj—211002 Uttar Pradesh. E-mail: rapsir2024@allduniv.ac.in. For updates, log on to: <https://allduniv.ac.in/faculties/statistics>.

Workshop on Advanced Pedagogies

A twenty-four-day National Workshop on ‘Advanced Pedagogies: Introduction to Blended Learning with LMS’ was organized by the Association of Indian Universities (AIU)—Academic and Administrative Development Centre (AADC), and Academic Staff College, Amity University Haryana (AUH) from October 30- November 22, 2023. The event focused on the innovative use of Learning Management Systems (LMS) to enhance pedagogical practices, all while providing hands-on experiences and insights from experts in the field.

During the Inaugural Session, Guest of Honor, Dr Pankaj Mittal, in her address, shared her perspectives on the evolving landscape of higher education and the pivotal role played by technology and advanced pedagogies. Dr Mittal emphasized the importance of harnessing the potential of technology to provide a richer and more engaging educational experience. Dr. Mittal highlighted the need for educators to adapt to the demands of the digital age and to equip students with skills that will serve them well in a technology-driven world. Dr. Mittal’s address served as a source of inspiration and motivation for the workshop’s participants, reinforcing the significance of their work in reshaping education for the better.

Prof P B Sharma, Vice Chancellor, Amity University Haryana focused on the pivotal role that technology plays in reshaping education, particularly in the context of advanced pedagogies and blended learning. Prof Sharma emphasized that modern education is undergoing a remarkable transformation with the integration of Learning Management Systems (LMS) and innovative pedagogical approaches. Prof Sharma discussed the profound impact of technology on education, stating, ‘The advent of technology has revolutionized the way we learn and teach. Blended learning, when harnessed effectively with LMS, allows educators to create dynamic, interactive, and personalized learning experiences for students.

Prof Madhukar’s address centered on the transformative role of technology in the realm of education and its significance in the context of advanced pedagogies and blended learning. He underscored the critical role technology plays in

modern education and its potential to revolutionize the teaching and learning process. He emphasized the power of digital tools and Learning Management Systems (LMS) in creating a more interactive and engaging educational environment. He spoke about the need for educators to adapt and innovate their pedagogical approaches to leverage the benefits of blended learning and LMS effectively.

Dr. Amarendra Pani, Joint Director and Director (I/c), Research Division, AIU during his address, encouraged educators to embrace a research-driven approach to pedagogy, emphasizing the importance of evidence-based teaching methods. He acknowledged the ever-evolving nature of education and the need for educators to adapt and grow through continuous research and learning. His address resonated with the attendees, highlighting the critical role research plays in reshaping the educational landscape.

Dr Sanjna Vij, Deputy Director, Amity Academic Staff College, Amity University Haryana, emphasized in her opening remarks the dynamic nature of higher education and the imperative for faculty members to continually evolve. In this ever-changing landscape, she underscored the significance of training, skill development, reskilling, upskilling, continuous learning, and adaptation as integral elements of every faculty member’s professional journey. Dr. Vij stressed the importance of cultivating skills, exploring creative and innovative teaching approaches, and staying abreast of evolving educational models and technologies. She emphasized that these proactive measures are essential in the present context to ensure alignment with global standards in education.

During the technical session, Dr. Karamjit Kaur, Associate Professor, Electronics and Communication Engineering, AUH conducted a comprehensive session introducing participants to Learning Management Systems (LMS). The session covered fundamental aspects of LMS, including a detailed overview of LMS. Participants gained insights into creating and navigating courses, utilizing the Dashboard, editing course settings and layout, and displaying information on course pages. Practical skills were honed as participants learned to add diverse content types such as images, presentations, worksheets, PDFs, embed

media, and shared web links. The engaging session facilitated a foundational understanding of LMS and its practical applications in educational settings, setting the stage for effective blended learning experiences.

During the technical session, Dr. Nisha Charaya, Assistant Professor, Electronics and Communication Engineering, AUH led a dynamic session focusing on 'Practical Aspects of Learning Management Systems'. The session delved into discussions on engaging activities and provided hands-on guidance on how to add various activities within the LMS framework. Participants gained insights into incorporating essential features like assignments, chat functionalities, and forum discussions, equipping them with the skills to create interactive and collaborative learning experiences. Dr. Nisha Charaya's session fostered a practical understanding of LMS applications, ensuring participants could confidently implement these activities in their educational endeavors.

Dr. Anil Kumar, Deputy Dean, Academics, AUH focused on enriching Learning Management Systems (LMS) experiences. The session featured discussions on engaging activities and allowed participants to showcase their understanding through presentations. Dr. Kumar guided participants on the practical aspects of adding diverse activities within the LMS, including quizzes, URLs, and more. The session not only encouraged collaborative learning but also equipped participants with the skills to enhance their courses with interactive and diverse content, fostering a dynamic and engaging educational environment.

Dr. Dheeraj Upadhayay, Director of Education Data Analytics, Amity University during the technical session, conducted an insightful session focusing on the intersection of educational technology and data analytics. The session included discussions on engaging activities and provided participants with a comprehensive introduction to course metalinks, repositories, and various plugins within the Learning Management System landscape. Dr. Upadhayay's expertise offered valuable insights into leveraging data analytics for educational

enhancement, emphasizing the importance of integrating innovative tools to create dynamic and data-informed learning environments. Participants gained a deeper understanding of the technological elements that can augment their teaching practices and improve the overall learning experience for students.

Mr. Akshat Aggrawal, Assistant Professor, Department of Computer Science and Engineering, ASET, AUH facilitated a comprehensive session dedicated to empowering educators with advanced skills in utilizing Learning Management Systems. The session involved creating dynamic activities to engage learners, managing discussions and collaboration, monitoring student activity through course reports, and providing insights into the crucial aspects of backing up and reusing course content. Participants were encouraged to actively contribute through presentations, fostering a collaborative and participatory learning environment. The session culminated in a valedictory segment, creating a platform for reflection, acknowledgment, and celebration of the collective achievements throughout the workshop.

The concluding session of the event featured impactful presentations by participants, showcasing their understanding and implementation of advanced pedagogies and blended learning with LMS. The session culminated in a valedictory segment, acknowledging the collective efforts and achievements throughout the event. The final session served as a platform for reflection, recognizing the commitment of participants, and fostering a sense of accomplishment in advancing pedagogical practices within the academic community. The event successfully covered essential aspects of Blended Learning with LMS, offering participants a comprehensive understanding of LMS functionalities and advanced pedagogical strategies. The active participation of attendees and presentations demonstrated a commitment to implementing learned techniques in their respective academic environments.

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THESES OF THE MONTH

SCIENCE & TECHNOLOGY

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

AGRICULTURAL & VETERINARY SCIENCES

Entomology

1. Patel, Satyendra. **Studies on pod borer (*Helicoverpa armigera*) hubner of chick pea (*Cicer arietinum*) and their management.** (Dr. Vinod Kumar Garg), Department of Entomology, Dr B R Ambedkar University of Social Sciences, Indore.

BIOLOGICAL SCIENCES

Biochemistry

1. Gowda, Shivakumar. **Development of nanomaterials for the management of colletotrichum truncatum causing anthracnose in chilli.** (Dr. S Sriram), Department of Biochemistry, Jain University, Bangalore.
2. Hemavathi, A. **Pathophysiology of cross reactive IgE binding legume glycoproteins in food induced atopy.** (Dr. S N Pramod and Dr. P Niranjana), Department of Biochemistry, Kuvempu University, Shankaraghatta.
3. Sunil, S V. **Molecular cloning and biochemical characterization of antimicrobial peptide from *trichogramma chilonis*.** (Dr. P Niranjana and Dr. B T Prabhakar), Department of Biochemistry, Kuvempu University, Shankaraghatta.
4. Tanimu, Habibu. **Combinatorial effect of medicinally important plant extracts for wound healing potentials.** (Dr. Bindhu O S), Department of Biochemistry, Jain University, Bangalore.

Biotechnology

1. Ankith, S. **Strategical investigation for development of effective pharmacophores targeting oncosignaling pathways.** (Dr. B T Prabhakar and Dr. Y L Ramachandra), Department of Biotechnology, Kuvempu University, Shankaraghatta.
2. Bhatt, Chandra Shekhar. **Development of biogenic large-area supported catalyst for efficient degradation of organic pollutants in waste water and the generation of active pharmaceutical precursors.** (Dr. Anil K Suresh and Dr. Nithya T G), Department of Biotechnology, SRM University, Kattankulathur, Chennai.
3. Mary, L Lizha. **Effects of chitosan-folate-hesperetin-anti-doublecortin-like kinase 1 nanoparticles on colon cancer and cancer stem cells *In vitro*.** (Dr. R

Satish), Department of Biotechnology, SRM University, Kattankulathur, Chennai.

4. Paul, Saptadipa. **Evaluation of antidiabetic polyherbal commercial formulations: An in-vitro study.** (Dr. Mala Majumdar), Department of Biotechnology, Jain University, Bangalore.
5. Sharma, Anjali. **Production and characterization of microbial silicase for potential application in removal of silica from rice straw.** (Dr. Jitender Sharma), Department of Biotechnology, Kurukshetra University, Kurukshetra.

Botany

1. Batra, Divya. **Studies on seed storage proteins under heat stress in *Vigna radiata* (L.) Wilczek.** (Dr. Yogesh Kumar), Department of Botany, Kurukshetra University, Kurukshetra.
2. Sharath, K P. **Phytochemical and pharmacological activities of *Macrosolen Parasiticus* (L) danser in Western Ghats of Karnataka, India.** (Dr. Raja Naika), Department of Applied Botany, Kuvempu University, Shankaraghatta.

Food Science & Nutrition

1. Anoop Kumar. **Assessment of nutritional status of rural school children (7-9 year) on the basis of food intake and food adequacy: In the special reference of District-Kanpur Dehat, Uttar Pradesh.** (Dr. Pinki Khanna and Dr. Arun Kumar), Department of Food and Nutrition, Dr B R Ambedkar University of Social Sciences, Indore.

Microbiology

1. Gabriel Kiran, P. **Isolation identification and characterization of bioactive compounds from fresh water microalgae.** (Dr. N Mallikarjun), Department of Microbiology, Kuvempu University, Shankaraghatta.
2. Sowjanya Kumari, S. **Expression of Peste des petits ruminants virus immunogenic protein in Baculovirus system and evaluation of its diagnostic potential.** (Dr. V Balamurugan), Department of Microbiology, Jain University, Bangalore.

Zoology

1. Ambareen, Kareema. **Genotoxicity and biochemical studies in *Cyprinus Carpio* (L) due to chlorpyrifos treatment.** (Dr. M Venkateshwarulu), Department of Applied Zoology, Kuvempu University, Shankaraghatta.

- Vinay Kumar, C. **Ecology and conservation of black buck *Antelope cervicapra* in Basur Amruth Mahal Kaval conservation Reserve Karnataka.** (Dr. Vijaya Kumara), Department of P. G Studies and Research in Wildlife and Management, Kuvempu University, Shankaraghatta.

EARTH SYSTEM SCIENCES

Environmental Science

- Patel, Bina Birenkumar. **Study of hybrid upflow anaerobic sludge blanket reactors using different inert media for sewage treatment.** (Dr. Paresh H. Rana), Department of Environmental Engineering, Gujarat Technological University, Ahmedabad.

ENGINEERING SCIENCES

Biomedical Engineering

- Chauhan, Rahulsinh Bhupendrasinh. **Digital Dental diagnosis from combination of radiographs and symptoms.** (Dr. Tejas Vinodchandra Shah), Department of Biomedical Engineering, Gujarat Technological University, Ahmedabad.

Chemical Engineering

- Pandere, Vaibhav Vijay. **Fuel generation from waste of electrical and electronic equipment.** (Dr. Alok Gautam), Department of Chemical Engineering, Gujarat Technological University, Ahmedabad.

Civil Engineering

- Vora, Akshay Vinaychandra. **Geographical Information System (GIS) aided noise mapping of Ahmedabad City for assessment of transportation induced noise pollution and remedial measures.** (Dr. Vasani Rupesh Parmanand), Department of Civil Engineering, Gujarat Technological University, Ahmedabad.
- Prasad, HD Raghavendra. **Performance characteristics and economical evaluation of various types of nanomaterial concrete.** (Dr. S C Sharma and Dr. Nagaraj Sitaram), Department of Civil Engineering, Jain University, Bangalore.
- Ramkumar, K. B. **Experimental investigation on fresh and hardened properties of hybrid steel fiber reinforced self compacting concrete and prediction of properties using ANN model.** (Dr. P R Kannan Rajkumar), Department of Civil Engineering, SRM University, Kattankulathur, Chennai.
- Shah, Dipsha Pareshkumar. **Evaluation of ambient air quality attributes and development of a composite Air Quality Index.** (Dr. Piyush J Patel), Department of Civil Engineering, Ganpat University, Mehsana.
- Singh, Shivangi. **Assessment of response of pichavaram mangroves to predicted sea level rise: A multidisciplinary approach using RSET–MH and palynological analysis.** (Dr. R Sathyanathan),

Department of Civil Engineering, SRM University, Kattankulathur, Chennai.

- Trambadia, Nevil Kishorkumar. **Flood inundation assessment of data-scarce Ghed Region at the Delta of Ozat River, Gujarat.** (Dr. Vinodkumar Manilal Patel), Department of Civil Engineering, Gujarat Technological University, Ahmedabad.

Computer Science & Engineering

- Guntupalli, Manoj Kumar. **Human interface intelligent gesture recognition system for hearing-impaired communities.** (Dr. A P Pandian), Department of Computer Science & Engineering, SRM University, Kattankulathur, Chennai.
- Kothai, G. **Intelligent transport system for traffic prediction, congestion avoidance and secured data transmission.** (Dr. E Poovammal), Department of Computer Science & Engineering, SRM University, Kattankulathur, Chennai.
- Manikandan, T T. **Investigations on network layer protocols for underwater communication using stochastic network calculus.** (Dr. Rajeev Sukumaran), Department of Computer Science & Engineering, SRM University, Kattankulathur, Chennai.
- Michel, Rwibasira. **Design of a conceptual and secure blockchain security framework for building trustable digital relationship.** (Dr. R. Suchithra), Department of Computer Science and Information Technology, Jain University, Bangalore.
- Pandiyan, G. **Efficient prediction model for offloading decision in edge computing.** (Dr. E Sasikala), Department of Computer Science & Engineering, SRM University, Kattankulathur, Chennai.
- Patel, Swatiben Vishnubhai. **Automatic sequencing of resources using hybrid scheduling technique for smart irrigation system.** (Dr. Satyen M Parikh), Department of Computer Application, Ganpat University, Mehsana.
- Prakruthi, M K. **Integrated imaging classification framework for diagnosing diabetic retinopathy.** (Dr. Komarasamy G), Department of Computer Science & Engineering, Jain University, Bangalore.
- Revathy, V R. **Emotion based music recommendation system using Bidirectional Encoder Representations from Transformers (BERT).** Department of Computer Applications, Hindustan Institute of Technology & Science, Chennai.
- Sowmiya, B. **MedRec framework for secure and privacy-preserved e-health record storage in a decentralized cloud.** (Dr. E Poovammal), Department of Computer Science & Engineering, SRM University, Kattankulathur, Chennai.
- Tayur, Varun M. **Dynamic context aware workflow composition in Internet of Things.** (Dr. Suchithra

R), Department of Computer Science and Information Technology, Jain University, Bangalore.

11. Trivedi, Het Tusharbhaj. **A recommendation model to resolve cavity to improve student outcomes.** (Dr. Ajaykumar M Patel), Department of Computer Application, Ganpat University, Mehsana.
12. Zabeeulla, AN Mohammed. **Automation of leaf disease prediction framework in different crop species.** (Dr. Chandrasekar B S), Department of Computer Science & Engineering, Jain University, Bangalore.

Electrical & Electronics Engineering

1. Gajjar, Nimita Ashish. **A novel control of grid tied PV-Dstatcom system.** (Dr. Tejas Naimish Zaveri), Department of Electrical Engineering, Gujarat Technological University, Ahmedabad.
2. Sangani, Dharaben Jashvantlal. **Pansharpening of MS Images using CSC and adaptive weight based algorithms.** (Dr. R A Thakker), Department of Electronics & Communication Engineering, Gujarat Technological University, Ahmedabad.
3. Tabassum, Zahira. **Analysis and design of demand side management model in smart grids: A Karnataka perspective.** (Dr. Chandrasekar B S), Department of Electronics Engineering, Jain University, Bangalore.

Electronics & Communication Engineering

1. Chris, A Benisha. **Optimization of nanostructured kesteritethinfilmsolarcell: Performanceenhancement using defect engineering and multiple quantum wells.** (Dr. Soumyaranjan Routray), Department of Electronics and Communication Engineering, SRM University, Kattankulathur, Chennai.
2. Dalvadi, Pravin Jagdishbhai. **Investigation and analysis of Quasi Yagi antenna for wireless applications.** (Dr. Amrut N Patel), Department of Electronics & Communication Engineering, Ganpat University, Mehsana.
3. Jani, Devang Girishbhai. **Real time human violence recognition and localization for indoor video using deep learning.** (Dr. Anand P Mankodia), Department of Electronics & Communication Engineering, Ganpat University, Mehsana.
4. Patel, Dharmeshkumar Jayantibhai. **Design, development and performance evaluation of LDPC coder on feed-forward neural network for image and audio decoding.** (Dr. Bhatt Ninad Sunilkumar), Department of Electronics & Communication Engineering, Gujarat Technological University, Ahmedabad.
5. Sachan, Smriti. **Design and analysis of energy efficient scheme in wireless sensor networks.** (Dr. Rohit Sharma), Department of Electronics & Communication Engineering, SRM University, Kattankulathur, Chennai.

Genetic Engineering

1. Ravichandiran, K. **Identification of the genes related to the biosynthesis of major secondary metabolites and seed oil through transcriptome sequencing of the fruit tissues of bitter gourd (Momordica charantia L).** (Dr.M Parani), Department of Genetic Engineering, SRM University, Kattankulathur, Chennai.

Instrumental & Communication Engineering

1. Dave, Jaimin Bharatkumar. **Decision Support System for food adulteration detection.** (Dr. Chetan Bhaskarray Bhatt), Department of Instrumentation and Control Engineering, Gujarat Technological University, Ahmedabad.

Mechanical Engineering

1. Chaudhari, Ashokkumar Ramjibhai. **Experimentation and simulation of electro-chemical magnetic abrasive finishing.** (Dr. Kesarabhai Bhikhabhai Judal), Department of Mechanical Engineering, Gujarat Technological University, Ahmedabad.
2. Doshi, Sachindra Jagdishbhai. **Experimental investigations on metal inert gas welding of aluminium alloy thin sheet.** (Dr. Jani Dilip Batukray), Department of Mechanical Engineering, Gujarat Technological University, Ahmedabad.
3. Khedkar, Yashpal Marutirao. **Analysis and testing of modified hydraulic active damper by magnetorheological approach.** (Dr. Sunil Bhat), Department of Mechanical Engineering, Jain University, Bangalore.
4. Shah, Sagarkumar Indravadan. **Investigations of mechanical properties, microstructure and corrosion behavior of duplex stainless steel weld.** (Dr. Hemantkumar Rameshchandra Thakkar), Department of Mechanical Engineering, Gujarat Technological University, Ahmedabad.
5. Shah, Jinesh Bipinbhai. **Development and performance analysis of stabilized oil blends extracted from non-edible agro residues as sustainable fuel for IC engines.** (Dr. Janak Balubhai Valaki), Department of Mechanical Engineering, Gujarat Technological University, Ahmedabad.
6. Shah, Saurabh Pravinchandra. **An investigation of the machining characteristics for hard to cut material using tin coated end milling inserts.** (Dr. Anand Yagneshbhai Joshi), Department of Mechanical Engineering, Gujarat Technological University, Ahmedabad.

Textile & Apparel Design

1. Shiza, Shashikant Parmar. **Study on physical and mechanical properties of basalt fibre preforms combination in laminates.** (Dr. Hireni Mankodi), Department of Textile Engineering, Gujarat Technological University, Ahmedabad.

MATHEMATICAL SCIENCES

Mathematics

1. Nandi, Ardhendu Kumar. **A study of matrices on semigraphs.** (Dr. Surajit Kr Nath), Department of Mathematical Sciences, Bodoland University, Kokrajhar.
2. Narzary, Santanu. **A study of some generalized partial metric spaces based on modular with applications in fixed point theory.** (Dr. Dipankar Das), Department of Mathematics, Bodoland University, Kokrajhar.
3. Ragul Kumar, E. **A study on natural convective nanofluid flow past a vertical cone with heat and mass flux.** (Dr.R.Sambath), Department of Mathematics, SRM University, Kattankulathur, Chennai.

MEDICAL SCIENCES

Pharmaceutical Science

1. Acharya, Himanshu Ajay. **Development and optimization of gastro-retentive formulations of hydralazine hydrochloride.** (Dr. Rakesh P Patel), Department of Pharmacy, Ganpat University, Mehsana.
2. Jani, Kaushalkumar, Pravinchandra. **Association of Vitamin D and cancer risk with special reference to solid tumors in Indian population.** (Dr. Sunita Goswami), Department of Pharmacy, Gujarat Technological University, Ahmedabad.
3. Patel, Jayendrakumar Dasharathlal. **Development and investigation of novel drug abuse deterrent technology for tapentadol hydrochloride.** (Dr. Rakesh P Patel), Department of Pharmacy, Ganpat University, Mehsana.
4. Richardson, James Vanessa. **Estimation of elemental impurities and evaluation of microbial contamination in selected fruit juices and herbal formulations.** (Dr. Hiral Panchal), Department of Pharmacy, Gujarat Technological University, Ahmedabad.

PHYSICAL SCIENCES

Chemistry

1. Nagarsha, K M. **Synthesis, characterization of naphthofuran derivatives and their pharmacological activities.** (Dr K P Latha), Department of Chemistry, Kuvempu University, Shankaraghata.

2. Patel, Sarikababen Pravinbhai. **Synthesis of medicinally important novel heterocyclic compounds and their applications.** (Dr. Hasit V Vaghani), Department of Chemistry, Ganpat University, Mehsana.
3. Roopesh, M. **Development of biodegradable nano porous drug eluting membranes or hydrogels for repairing infected wounds and membranes with antibiofouling properties.** (Dr. Rangappa S Keri), Department of Chemistry, Jain University, Bangalore.
4. Shet, Sachin M. **Designing and development of strategies for protein packaging with enhanced stability for improved biocatalysis.** (Dr. Dibyendu Mondal and Prof. S K Nataraj), Department of Chemistry, Jain University, Bangalore.

Physics

1. Basumatary, Rajib Kumar. **Magnetic properties of CoTbNi and FePtCo ternary alloy thin films prepared by DC magnetron sputtering for ultra-high density storage media.** (Dr. Rajeeb Brahma), Department of Physics, Bodoland University, Kokrajhar.
2. Katoch, Neha. **Novel two dimensional structures beyond graphene: A first principle study.** (Dr. Jagdish Kumar), Department of Physics & Astronomical Science, Central University of Himachal Pradesh, Kangra.
3. Khachi, Anil. **Numerical simulations of nuclear reaction scattering cross-sections using phase function method.** (Prof.O S K S Shastri), Department of Physics & Astronomical Science, Central University of Himachal Pradesh, Kangra.
4. Madanakumara, H. **Synthesis and characterization of doped Fe₂O₃ nano particles for photocatalytic and electrochemical applications.** (Dr. H S Jayanna), Department of Physics, Kuvempu University, Shankaraghata.
5. Madhuvathaini, G S. **Nanostructured higher manganese silicides: Towards low-cost and highperformance thermoelectric power generation.** (Dr.Suresh Perumal), Department of Physics, SRM University, Kattankulathur, Chennai.
6. Swapna. **Activity based pedagogy incorporating guided inquiry strategy and modeling theory for liquid drop model.** (Prof. O S K S Shastri), Department of Physics & Astronomical Science, Central University of Himachal Pradesh, Kangra. □

Opinions expressed in the articles published in the University News are those of the contributors and do not necessarily reflect the views and policies of the Association.

Shri Prince Shivaji Maratha Boarding House',
Kolhapur
COLLEGE OF ARCHITECTURE, KOLHAPUR
1062, A Ward, Shivaji Peth, Kolhapur – 416 012
(Maharashtra)
(Affiliated to Shivaji University, Kolhapur)
(Permanently Non - Grant)

WANTED

Applications are invited from eligible candidates for the following post:

Sr. No.	Subject	Vacant Post	Total Vacant Post
1	Principal	01	Post – 01 (Open to All)

Note: For detailed information about post, qualifications and other terms and conditions, please visit university **Website : www.unishivaji.ac.in**.

Place : Kolhapur

Date :

Chairman
Shri Prince Shivaji Maratha Boarding House,
Kolhapur -416 012

**RAMISHT COLLEGE OF EDUCATION,
BASOHLI, KATHUA**
(Affiliated to Jammu University and Recognized
by UGC)
Web: www.ramishtcollege.com
Email: ramishtcollegebasohli@rediffmail.com
Ph:7298271701

Requires

Applications along with Biodata, Photographs, Aadhaar Card and Documents of Academic Qualifications (10th onwards) for the post of Librarian, Asstt. Prof. in Science, Education and Maths. Academic Qualifications:- Master Degree in relevant subject and M.Ed (at least 55% marks in both subjects). For the post of Librarian (B.Lib or M.Lib). Salary as per JU norms. Application must reach to the College office latest by **10th of January, 2024** through **E-mail. ID: ramishtcollegebasohli@rediffmail.com**.

Note: NET, Ph.D. will be given preference.

Sd/-
Chairman
No;-Ramisht/Adv./2023/04
Dated:18/12/2023
Ramisht College of
Education, Basohli

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Applications are invited for the post of

1. **Assistant Professor in Physical Science, One Post (Open Quota reserved for PWD).**
2. **UGC Librarian, One Post**
3. **Computer Assistant, One Post (Reserved for PWD).**

The Vacancies 1 & 3 are reserved for persons with **benchmark disabilities** as mentioned in Clause 34 of the RPWD Act 2016 and G.O. (MS) No.242/2022/H.Edn. dated 18.05.2022 & U.O.20586/AC B1-2/2022 /ACAD, dated 27.09.2022. Age and qualifications shall be as per UGC/ NCTE/Government of Kerala/Mahatma Gandhi University, Kottayam norms.

Apply **within 30 days** of publication of this notification and the application forms can be obtained from the College Office on payment of Rs.1000/-or Rs.1100/-by post. Application form fee exempted for post 1 & 3.

Manager

WANTED

Applications are invited for the post of Principal to be filled in **Bramheshwar Senior (Art & Science) College, Bamni, TQ. Jintur, Dist. Parbhani** (Permanent non-grant) run by **Krantiveer Lahuji Salve Shikshan Prasarak Mandal, Bamni, TQ. Jintur, Dist. Parbhani. (MINORITY Institute)**. Eligible candidates should submit their applications along with all necessary documents **within fifteen days** from the date of publication of the advertisement by registered post only.

Sr. No.	Name of the Post (Designation)	No. of Posts	Reservation
01	Principal	01	unreserved

Essential Qualification : (A or B)

Minimum educational qualification for the post of Principal will be as per Regulation of UGC Dt. 18 July 2018 and G.R. of Government of Maharashtra Dt. 08 March 2019.

1. Ph.D degree ;
2. Professor / Associate Professor with a total service/experience of at least fifteen years of teaching/research in Universities, Colleges and other institutions of higher education.
3. A minimum of 10 research publication in peer-reviewed or UGC-listed journals; and
4. A minimum of 110 Research Score as per Appendix II, Table 2.

B Tenure:

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

Salary & Allowances: Pay Scale as per UGC, State Government of Maharashtra & S.R.T.M. University, Nanded rules from time to time.

7th Pay Scale : Academic Level – 13 A (131400-217100)

Note :

1. Prescribed application form is available on the University **website: www.srtmun.ac.in**.
2. No T.A./D.A. will be paid to attend the interview.
3. Eligible candidates those who are already in service should submit their applications through proper channel.
4. All attested Xerox copies of certificates and other relevant documents should be attached with the application form.
5. The appointment on the basis of final decision of Hon'ble High Court, Aurangabad Bench of Writ Petition No.12051/2015.
6. The appointment on the basis of final decision of Hon'ble Supreme Court, in special Writ Petition No.15737/2019 & other petition.

Address for the correspondence

The President,

Krantiveer Lahuji Salve Shikshan Prasarak Mandal, Bamni, Tq. Jintur, Dist. Parbhani.

**Renuka Education Society, Latur
Renuka College of Education, Renapur
Tq. Renapur Dist. Latur**

(Permanent Unaided/Non-Granted - NCTE & Gov. of Maharashtra Approved)

WANTED

Applications are invited for the following posts in **Renuka College of Education, Renapur, Tq. Renapur Dist. Latur**. Eligible candidates should submit their applications with all necessary documents **within Fifteen days** from the date of publication of the advertisement by Registered Post only. Candidates from Reserved Category have to send one copy of their application to The Assistant Registrar, Special Cell, SRTM University, Nanded - 431606

Sr. No.	Name of Post	Subject	Qualification	No. of Post.	Reservation
01	Assistant Professor	Perspectives in Education	M.A (Sociology, Philosophy, Psychology Political Science etc.) /M.Ed. SET/NET/ Ph.D.	03	Open – 04 ST - 01 VJA - 01 OBC - 03
02	Assistant Professor	Pedagogy Subjects (Math's, Science, Social Science/ Hindi)	M.A./M.Sc./M.Com/M.Ed. SET/NET/ Ph.D.	04	
03	Assistant Professor	Performing Art (Music/Dance/ Theatre/Fine Arts)	Performing (Music/Dance/ Drama /Theatre/Fine art with Minimum 55% Marks SET/NET/ Ph.D.	01	
04	Assistant Professor	Health and Physical Education	M.P.Ed with Minimum-55% Marks SET/NET/ Ph.D.	01	

1. **Educational Qualification :** Good academic record with at least 55% marks at P.G. degree level and SET/NET/PHD degree as per UGC regulations & NCTE regulation 2014.
2. **Scale and allowances :** As per the norms of UGC/Mah.Gov/SRTMU, Nanded & College Institute.
3. Prescribed application form is available on the university website.
4. No. TA/DA will be paid to candidates to attend the interview.
5. 3% reservation for handicapped and 30 % from women candidates.
6. Eligible candidate those who are already in services should submit their application through proper channel.
7. As per G.R. No. संकीर्ण- 2205 / प्र. क्र. 98 / विरि-1, Dte : 24/06/2022 Sr. 03 the Reservation policy for teaching & non- teaching post have not applied for permanent Non. Granted colleges/institutions.

Address : Renuka College of Education (B.Ed.), Renapur Tq. Renapur Dist. Latur Pin : 413527.

President
Renuka Education Society, Latur

Principal
Renuka College of Education, Renapur

Secretary
Renuka Education Society, Latur

Vidya Vikas Mandal Sanchalit
Kai. Amdar Kakasaheb Salunkhe – Patil Arts & Science College Javala
Tal. Sangola Dist. Solapur, Maharashtra
(Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur)

UNAIDED (NON - MINORITY)

Applications are invited from eligible candidates for following Post of Assistant Professor:

Sr. No	Subject Designation	No-Objection Certificate given by Govt. of Maharashtra Vacant Posts	No-Objection Certificate given by Govt. of Maharashtra Posts Reservation
01	Physical Education	01	Open-1
02	Librarian	01	OBC-1
03	Hindi	01	EWS-1
04	Geography	01	VJ-A-1
	Total Post	04	

INSTRUCTIONS:-

- Open Posts are open to all, however candidates from any category can apply for the post.
- Educational Qualification and other requirements are as prescribed by the UGC Notification dtd. 18th July 2018 Govt. of Maharashtra Resolution No.- Misc. 2018 / C.R56/18UNI-1 dtd. 8th March 2019 and University Circular No PAHSUS/Estt/7th pay /2019/2285/dtd. 25th March 2019.
- A relaxation of 5% shall be allowed at the Bachelors as well as the Masters Level for the candidates belonging to SC/ST/OBC (Non – Creamy Layer) Differently-abled for the purpose of eligibility and assessing good academic record for direct recruitment.
- Reserved Category candidates who are domiciled out of Maharashtra State will be treated as Open Category candidates.
- Reserved Category candidates should also to send a copy of their application to the Deputy Registrar, Special Cell, Punyashlok Ahilyadevi Holkar Solapur University, Solapur.
- Application received after the last date will not be considered. The College will not be responsible for postal delay, if any.
- Reservation for PWD, Women and Disabled persons will be as per the Govt. norms.
- Reserved category candidates shall produce the Caste Validity Certificate as per the directives issued by the State Government vide Circular No.BCC-201/Pra.Kra.1064/2011/16B dated 12.12.2011.
- Reserved category candidates (except SC/ST) shall produce Non-Creamy Layer Certificate at the time of interview.
- Reservation for VJNT Categories is internally transferable.
- Applicants who are in service must send their application through proper channel.
- Applicants are required to account for breaks if any, in their academic career.
- T.A.D.A. will not be paid for attending the interview.
- Applications with full details should reach through the channel Secretary, Vidya Vikas Mandal, Javala **within 30 days** from the date of publication of this advertisement.
- Incomplete applications will not be entertained.
- All the Terms & Conditions are applicable as mentioned in the NOC letter NO. JDHE Solapur/ NOC/2019/3 dated 17.01.2023 from Hon Deputy Secretary, Higher and Technical Education Dept., Govt. of Maharashtra, Mumbai and letter NO. DJD/HE/SDS/2023/138 dated 24.01.2023 Hon Deputy Director of Higher Education, Solapur Division, Solapur.
- All the Terms & Conditions are applicable as mentioned in the GR Dated 12.11.2021 from Higher and Technical Education Department of Government of Maharashtra.
- Please note that the recruitment procedure initiated by this advertisement subject to decision by Hon Bombay High Court, Aurangabad Bench on Writ Petition No 12051/2015.
- This is University approved advertisement.

Dist. Solapur

Secretary / Principal
Vidya Vikas Mandal Javala Tal.Sangola

Vidya Vikas Mandal Sanchalit
Kai. Amdar Kakasaheb Salunkhe – Patil Arts & Science College Javala
Tal. Sangola Dist. Solapur, Maharashtra
(Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur)

NON – MINORITY

UNAIDED

Applications are invited for the Post of PRINCIPAL from the Academic Year 2023-24:

Sr. No	Subject/Designation	Total Vacant Post
1)	Principal	01

- 1) The above post is Open to all, however Candidates from any Category can apply for the post.
- 2) Educational Qualification and other requirements are as prescribed by the UGC Notification dtd.18th July 2018 Govt. of Maharashtra Resulation No- Misc 2018/ C.R56/18UNI-1 dts.8th March 2019 and University Circular No PAHSUS/ Estt/7 th pay /2019/2285/dtd. 25th March 2019.
- 3) Candidates should submit there Academic Research Score (Academic Performance Indicator) report with related documents (Only for the post of Principal).
- 4) A relaxation of 5% shall be allowed at the Bachelors as well as the Masters Level for the candidates belonging to SC/ ST/OBC (Non –Creamy Layer) Differently-abled for the purpose of eligibility and assessing good academic record for direct recruitment.
- 5) Reserved Category Candidates, who are domiciled out of Maharashtra State will be treated as open category candidates.
- 6) Reserved Category candidates should also to send a copy of their application to the Deputy Registrar, Special Cell, Punyashlok Ahilyadevi Holkar Solapur University, Solapur.
- 7) Applications received after the last date will not be considered. The College will not be responsible for postal delay, if any.
- 8) Reservation for women and disabled persons will be as per the Govt. norms.
- 9) Reserved category candidates shall produce the Caste Validity Certificate as per the directives issued by the State Government vide Circular No.BCC-201/Pra.Kra.1064/2011/16B dated 12.12.2011.
- 10) Reserved category candidates (except SC/ST) shall produce Non-Creamy Layer Certificate at the time of interview.
- 11) Applicants who are in service must send their application through proper channel.
- 12) Applicants are required to account for breaks, if any, in their academic career.
- 13) Incomplete applications will not be entertained.
- 14) T.A.D.A. Will not be paid for attending the interview.
- 15) Applications with full details should reach to the Secretary Vidya Vikas Mandal Javala **within 30 days** from the date of publication of this advertisement. Incomplete application will not be entertained.
- 16) This is University approved advertisement.

Place-Sangola
Date. 2023

Secretary
Vidya Vikas Mandal Javala Tal. Sangola
Dist. Solapur

डॉ. राममनोहर लोहिया अवध विश्वविद्यालय, अयोध्या



विश्वविद्यालय प्रगति के सोपान

डॉ0 राममनोहर लोहिया अवध विश्वविद्यालय की स्थापना 04 मार्च, 1975 में अवध विश्वविद्यालय के रूप में की गई। इस शैक्षिक यात्रा में विश्वविद्यालय ने कई उपलब्धियां अर्जित की है। इसी क्रम में विश्वविद्यालय ने राष्ट्रीय एवं अन्तरराष्ट्रीय स्तर पर अपना बहुमूल्य योगदान प्रदान किया है। वर्तमान विश्वविद्यालय की कुलपति प्रो0 प्रतिभा गोयल जी के कुशल नेतृत्व व मार्गदर्शन में विश्वविद्यालय नये शैक्षणिक आयाम स्थापित किए है। प्रारम्भ से अबतक विश्वविद्यालय ने चहुँमुखी विकास किया है। जिसके कुछ महत्वपूर्ण बिन्दु निम्नवत है:

- अवध विश्वविद्यालय के सात जिलों के महाविद्यालयों की सम्बद्धता के साथ तीन संघटक महाविद्यालय विभिन्न जिलों में संचालित।
- विश्वविद्यालय परिसर में कुल 88 पाठ्यक्रमों का संचालन एवं 40 से अधिक विषयों में पीएचडी की सुविधा।
- विश्वविद्यालय प्रशासन ने अयोध्या के राम की पैड़ी व चौधरी चरण सिंह के 51 घाटों पर 25 हजार स्वयंसेवकों की मदद से 22 लाख 23 हजार से अधिक दीपों को प्रज्वलित कर गिनीज बुक ऑफ वर्ल्ड रिकार्ड में पुनः नाम दर्ज कराया।
- परिसर एवं सम्बद्ध महाविद्यालयों के छात्र-छात्राओं में कौशल को विकसित करने के लिए उत्तर प्रदेश कौशल विकास मिशन के सहयोग से परिसर में स्किल हब की स्थापना की गई।
- विवि के समाज कार्य एवं समाजशास्त्र विभाग के विद्यार्थियों को अयोध्या स्थित वृद्धाश्रम से जोड़ा गया है जिससे वृद्धों के प्रति समाज की सहानुभूति को स्वानुभूति में परिवर्तित किया जा सके।
- परिसर में जैविक उर्वरक प्लांट स्थापित किया गया। छात्र-छात्राओं को जैविक उर्वरक बनाने की विधि से प्रशिक्षित किया जा रहा है।
- विवि द्वारा देश के विभिन्न उत्कृष्ट संस्थानों के साथ वर्ष 2023 में 40 शोध, शैक्षिक एवं प्लेसमेंट संबंधी एमओयू किए गए।
- विश्वविद्यालय द्वारा गोद लिए गांव माधवपुर मसौधा की महिलाओं एवं बेटियों के सशक्तिकरण के लिए प्रशिक्षण एवं जागरूकता शिविर लगाया गया।
- 21 जून को अन्तरराष्ट्रीय योग दिवस पर वृहद स्तर पर विश्वविद्यालय एवं सम्बद्ध महाविद्यालयों के 2,93,210 शिक्षकों एवं विद्यार्थियों ने योग किया।
- विवि एवं सम्बद्ध महाविद्यालयों में राष्ट्रीय शिक्षा नीति-2020 के तहत स्नातक एवं परास्नातक पाठ्यक्रमों में शिक्षण कार्य प्रारम्भ।
- विवि में सिंगल विंडो द्वारा छात्र समस्या का त्वरित निराकरण और छात्रों के उपाधियां डाक द्वारा प्रेषण की सुविधा।

Mother Velankani Education Trust's
Ashadeep Adhyapak Mahavidyalaya (B.Ed.)
Mahesh Park, Tulinj Road, Nallasopara (E), Tal.-Vasai, Dist-Palghar -401209.

(A Christian Religious Minority College)
APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS
FROM THE ACADEMIC YEAR 2023-24

UN-AIDED

Sr No.	Cadre	Subject	Total No. of Posts	Post Reserved for
1.	Principal	--	01	01-OPEN
2.	Assistant Professor	(Education in Marathi, Hindi, English, History, Geography, Economics, Commerce, Science & Mathematics Methods)	15	15-OPEN
3.	Librarian	--	01	01-OPEN

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

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

Candidates having knowledge of Marathi will be preferred.

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

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

Application with full details should reach the CHAIRMAN, Mother Velankani Education Trust's, Ashadeep Adhyapak Mahavidyalaya (B.Ed.), Mahesh Park, Tulinj Road, Nallasopara (E), Tal. Vasai, Dist Palghar 401209, **within 15 days** from the date of publication of this advertisement. This is University approved advertisement.

Sd/-
CHAIRMAN

Jijau Gramin Krushi Vikas Pratishthan, Mahila Sevabhavi Sanstha Sanchlit
Sant Bhagwan Baba College of Arts and Sciences
Ghatshil Pargaon, Taluka Shirur Kasar Dist. Beed

WANTED

Jijau Gramin Krushi Vikas Pratishthan, Mahila Sevabhavi Sanstha Sanchlit, Sant Bhagwan Baba College of Arts and Sciences, Ghatshil Pargaon, Taluka Shirur Kasar, Dist. Beed (Permanent Unaided) are to fill following posts of College Principal and Full Time Teachers immediately (2023-24):

Sr. No	Subject	Vacancy Post	Sr. No	Subject	Vacancy Post
1	Principal	1	10	Geography	2
2	English	2	11	Physical Education	1
3	Marathi	2	12	Chemistry	4
4	Hindi	2	13	Physics	2
5	History	1	14	Botany	3
6	Political Science	1	15	Zoology	3
7	Sociology	1	16	Math	2
8	Economics	1	17	Librarian	1
9	Public Administration	1	18	Director of Physical Edu.	1

➤ **For the above Teacher's posts, SC 13%, Scheduled Tribes 7%, VJ A 3%, NT B 2.5%, NT C 3.5%, NT D 2%, SBC 2%, OBC 19%, EBC 10%, Unreserved 38%, 30% for women, 4% for disabled, 1% for orphans and unreserved for the post of Principal.**

1. A copy of the application submitted by the backward class applicants to the President/Secretary of the Institute to the Deputy Chancellor, Special Room Division, to be sent to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
2. Sh. No. NCG 1298/ (4619) Uni-4 d. as on December 11, 1999, the requirement of 55% marks for Master's degree for Scheduled Castes and Scheduled Tribes has been relaxed to 50%.
3. The requirement of 55% marks has been relaxed to 50% for Master's degree for disabled candidates.
4. Backward category candidates can apply for unreserved posts. Unreserved posts will be filled on merit basis.
5. Since 10% reservation will be given to the Economically Weaker Sections, after the completion of the reservation process for the Economically Weaker Section in the recruitment posts from the open category, 10% of the posts may be reserved for them and changed to unreserved category posts accordingly.

Eligibility:-

- 1) University Grants Commission, New Delhi for the post of Principal/Teacher and Dr. Babasaheb Ambedkar Marathwada University, Aurangabad from time to time prescribed qualifications and rules candidate should be eligible.

Candidates should send their applications personally or by post to the following address within 15 days from the date of publication of advertisement.

Note:- After receiving the application form of the candidate, the interview will be called by phone or by letter and the traveling allowance and other allowance will not be given to the candidate appearing for the interview.

Address:- Jijau Gramin Krushi Vikas Pratishthan Mahila Sevabhavi Sanstha, Residence of Sushilatai Morale, Swarajya Nagar, Barshi Road, Beed Taluka District Beed. (Mobile-9403036934/9422242683)

President/Secretary
Jijau Gramin Krushi Vikas Pratishthan
Mahila Sevabhavi Sanstha Banegaon

“SHIKSHAN PRASARAK MANDAL MANGALWEDHA”
DALIT MITRA KADAM GURUJI VIDNYAN MAHAVIDYALAYA, MANGALWEDHA
Tal-Mangalwedha, Dist- Solapur, Maharashtra
(Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur)
AIDED (NON-MINORITY)

Applications are invited from eligible candidates for the following Post of Principal:

Sr. No.	Subject/ Designation	No-Objection Certificate given by Govt. of Maharashtra posts	No-Objection Certificate given by Govt. of Maharashtra Vacant Posts Reservation
01	Principal	01	Open-01

CONDITIONS:

1. The above post is open to all, however candidates from any category can apply for the post.
2. Educational Qualification and other requirements are as prescribed by, the UGC Notification dtd. 18th July 2018, Govt. of Maharashtra Resolution No. Misc 2018/ C.R.56/18 UNI -1 dtd. 8th March 2019 and University Circular No. PAHSUS/Estt/7th pay /2019/2285/ dtd. 25th March 2019.
3. Candidates should submit their Academic Research Score (Academic Performance Indicator) report with related documents. (Only for the post of Principal.)
4. A relaxation of 5% shall be allowed at the Bachelors as well as at the Masters Level for the candidates belonging to SC/ST/OBC (Non-Creamy Layer)/Differently-abled for the purpose of eligibility and assessing good academic record for direct recruitment.
5. Reserved Category candidates, who are domiciled out of Maharashtra State, will be treated as open category candidates.
6. Reserved Category candidates should also to send a copy of their application to the Deputy Registrar, Special Cell, Punyashlok Ahilyadevi Holkar Solapur University, Solapur.
7. Application received after the last date will not be considered. The College will not be responsible for postal delay, if any.
8. Reservation for Women and Disabled persons will be as per the Govt. norms.
9. Reserved category candidates shall produce the Caste Validity Certificate as per the directives issued by the State Government vide Circular No. BCC-201/Pra.Kra. 1064/2011/16B dated 12-12- 2011.
10. Reserved category candidates (except SC/ST) shall produce Non-Creamy Layer Certificate at the time of interview.
11. Applicants who are in service must send their application through proper channel.
12. Applicants are required to account for breaks, if any, in their academic career.
13. Incomplete application will not be entertained
14. T.A.D.A. will not be paid for attending the interview.
15. Applications with full details should reach through the channel Secretary, Shikshan Prasarak Mandal, Mangalwedha Dalit Mitra Kadam Guruji Vidnyan Mahavidyalaya, Mangalwedha, Taluka-Mangalwedha, Dist- Solapur-413305 **within 15 days** from the date of publication of this advertisement.
Incomplete application will not be entertained.
16. This is University approved advertisement.
17. To download the application form, visit our **website <https://www.dmkcollegemangalwedha.in/>**

Place - Mangalwedha

Date:- 25/12/2023

Secretary
Shikshan Prasarak Mandal, Mangalwedha
Tal- Mangalwedha, District- Solapur - 413 305

“SHIKSHAN PRASARAK MANDAL MANGALWEDHA”
DALIT MITRA KADAM GURUJI VIDNYAN MAHAVIDYALAYA, MANGALWEDHA
Tal-Mangalwedha, Dist- Solapur, Maharashtra
(Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur)

AIDED (NON-MINORITY)

Applications are invited from eligible candidates for the following Posts of Assistant Professor
Physical Director & Librarian

Sr. No.	Subject/ Designation	No-Objection Certificate given by Govt. of Maharashtra posts	No-Objection Certificate given by Govt. of Maharashtra Vacant Posts Reservation
01	Physics	02	SC-04 ST-02 OPEN-13 OBC-07 EWS-03 VJ-A-01 NT-B-01 NT-C-01 NT-D-01 SBC-01 (Out of above 01 post will be reserved for PWD)
02	Chemistry	09	
03	Botany	03	
04	Zoology	03	
05	Mathematics	01	
06	English	03	
07	Marathi	02	
08	Hindi	02	
09	History	01	
10	Economics	01	
11	Geography	05	
12	Physical Director	01	
13	Librarian	01	

CONDITIONS:

- Open post is open to all, however candidates from any category can apply for the post.
- Educational Qualification and other requirements are as prescribed by, the UGC Notification dtd. 18th July 2018, Govt. of Maharashtra Resolution No.Misc 2018/ C.R.56/18 UNI -1 dtd. 8th March 2019 and University Circular No. PAHSUS/Estt/7th pay /2019/2285/ dtd. 25th March 2019.
- A relaxation of 5% shall be allowed at the Bachelors as well as at the Masters Level for the candidates belonging to SC/ST/OBC (Non-Creamy Layer)/Differently-abled for the purpose of eligibility and assessing good academic record for direct recruitment.
- Reserved category candidates, who are domiciled out of Maharashtra State, will be treated as open category candidates.
- Reserved category candidates should also to send a copy of their application to the Deputy Registrar, Special Cell, Punyashlok Ahilyadevi Holkar Solapur University, Solapur.
- Applications received after the last date will not be considered. The College will not be responsible for postal delay, if any.
- Reservation for PWD, Women and Disabled persons will be as per the Govt. norms.
- Reserved category candidates shall produce the Caste Validity Certificate as per the directives issued by the State Government vide Circular No.BCC-201/Pra.Kra. 1064/2011/16B dated 12-12- 2011.
- Reserved category candidates (except SC/ST) shall produce Non-Creamy Layer Certificate at the time of interview.
- Reservation for VJNT Categories is internally transferable.
- Applicants who are in service must send their application through proper channel.
- Applicants are required to account for breaks, if any, in their academic career.
- T.A., D.A. will not be paid for attending the interview.
- Applications with full details should reach through the proper channel to the Secretary, Shikshan Prasarak Mandal, Mangalwedha Dalit Mitra Kadam Guruji Vidnyan Mahavidyalaya, Mangalwedha, Taluka- Mangalwedha, Dist-Solapur-413305 **within 15 days** from the date of publication of this advertisement.
- Incomplete application will not be entertained.
- All the Terms & Conditions are applicable as mentioned in the NOC letter No. JDHESolapur/NOC/2020/10 dated 06.11.2023 from Hon. Deputy Secretary, Higher and Technical Education Dept, Govt. of Maharashtra, Mumbai and letter No. DJD/HE/SDS/2022/250 dated 01.09.2023, Hon. Deputy Director of Higher Education, Solapur Division, Solapur.
- All the Terms & Conditions are applicable as mentioned in the GR Dated 18.10.2023 from Higher and Technical Education Department of Government of Maharashtra.
- Please note that the recruitment procedure initiated by this advertisement subject to decision by Hon. Bombay High-Court, Aurangabad Bench on Writ Petition No. 12051/2015.
- This is University approved advertisement.
- To download the application form, visit our [website https://www.dmkgcollegemangalwedha.in/](https://www.dmkgcollegemangalwedha.in/)

Place - Mangalwedha

Date:- 25/12/2023

Secretary
Shikshan Prasarak Mandal, Mangalwedha
Tal- Mangalwedha, District- Solapur - 413 305

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