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Saroj Sharma and Sunita Joshi Kathuria

Early Childhood and Learning for Creating a Base for Strong
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Early Childhood and Learning for Creating a Base for Strong Higher Education: With Special Reference to National Curriculum Framework for Foundational Stage–2022

Saroj Sharma* and Sunita Joshi Kathuria**

Learning gives creativity, creativity leads to thinking, thinking provides knowledge, and knowledge makes you great

and

Real education enhances the dignity of a human being and increases his or her self-respect

These quotes of the 11th President of India, Dr. Abdul Kalam Azad, prudently present the value of learning and education. Education increases the ability to fight against injustice, corruption, violence, disparity, and communalism, which are the biggest threats to the advancement of the country, which also broadens the vision and outlook and inspires a spirit of healthy competition and a passion to progress for the accomplishments. Education helps in realizing one's greatest potential. Highlighting the value of education, Acharya Charaka mentioned in Charaka Samhita, a Sanskrit text on Ayurveda (one of the oldest traditional medical systems) belonging to the period between the 4th century BCE to the 2nd century CE that:-

विद्या वितर्को विज्ञानं स्मृतिः तत्परता क्रिया ।
यस्यैते षड्गुणास्तस्य नासाध्यमतिवर्तते ॥

Charaka Samhita, (verse 9.21)

The shloka means:-

For a person who possesses the six virtues i.e., Knowledge, Power of Thinking, Scientific Knowledge, Remembering Power, Readiness, and Functional Ability, nothing is regarded as being impossible for him/her.

Another shloka mentioned the significance of knowledge in सम्योचितपद्यरत्नमालिका says:-

सम्योचितपद्यरत्नमालिकामातेव रक्षति पितेव हिते नियुक्ते
कान्तेव चापि रमयत्यपनीय खेदम् ।
लक्ष्मीं तनोति वितनोति च दिक्षु कीर्तिम्
किं किं न साधयति कल्पलतेव विद्या ।

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The meaning of the shloka is: -

Knowledge protects like a mother, benefits like a father, relieves fatigue like a wife, pleases the mind, gives beauty, and spreads fame in all four directions. Knowledge is just like a *Kalpavriksha* (a wish-fulfilling divine tree), which is a universally recognized emblem of a source of blessings and eternal life.

The aforementioned shlokas illustrate the significance of education and knowledge for leading a healthy, balanced life since they enable a person to have a better perspective and to make thoughtful judgements. The constitution of India envisages an inclusive, equitable, and pluralistic Indian society, where every Indian experience equity and equality in action and principles. And, to achieve this, the recently launched National Education Policy (NEP) 2020 recommends '*preparing the upcoming generation*' to meet the current challenges of the 21st century, specifically the cognitive and linguistic demands of this knowledge-based society. NEP 2020 suggested a number of changes to the current system in order to improve education. It suggested modification in the stages for curriculum and pedagogy i.e. from the 2 staged (10+2 structure) to the 4 staged, 5+3+3+4 structure, namely Foundational Stage (5 years, Ages 3-8), Preparatory Stage (3 years, Ages 8-11), Middle Stage (3 years, Ages 11-14), and Secondary Stage (4 years, Ages 14-18). The foundational stage, being the initial stage is considered to be the most significant of all as it lays a foundation for determining a person's overall quality of life (Lorna K.S Chan & Lily Chan, 2003). Numerous recent studies conducted around the globe have demonstrated the enormous benefits that high-quality early education programmes give young children the proper stimulation and meaningful learning experiences (Woodhead, 1999, Eunice Pui-yu Yim, 2018 and UNESCO, 2022). Children's brains develop remarkably between birth and age eight, which is an important window of opportunity for schooling (UNESCO, 2022). Investments in early childhood care and education have the potential to alter social decision-making over the long run and encourage the upholding of social norms, both of which have positive long-term effects (Luo, Hetu, Lohrenz, et al., 2018). The exposure and experience gathered at this stage enhance the ability of the child to learn and perform better not only in school but in other settings as well (Woodrow, C., 1999).

Furthermore, it is unquestionably true that investing in a child's early development pays off in the long term. However, the data represented by UNESCO in the World Conference on Early Childhood Care and Education (ECCE) revealed that 1 in 4 children aged 5 has never received any kind of pre-primary education. UIS Global Database, 2018 mentioned that despite the undeniable and long-lasting advantages, more than 175 million children worldwide — or over half of all children of pre-primary age — are not enrolled in pre-primary education (UNICEF, 2018). UNESCO also mentions that in many nations, ECCE continues to receive little attention from official policies and investments. The majority of challenges relating to socioeconomic position, ethnicity, gender, language, developmental delays, and disabilities, as well as living in distant and marginalized geographic areas, have not yet been addressed by many countries (Lorna K.S Chan & Lily Chan, 2003, Penn, 2008, and Eunice Pui-yu Yim, 2018). In the context of India, NEP (2020) document reveals that some young children, particularly those from socioeconomically disadvantaged households, do not currently have access to high-quality ECCE. Moreover, according to a UNESCO report, inadequate regulation of the sector, lack of public provision, lack of clarity on ECCE at the policy level, chronic underfunding, and lack of public support are just a few of the issues that operate as barriers to guaranteeing access to high-quality ECCE. It also emphasizes how enhancing the capacity of ECCE systems across the board could aid in the accomplishment of the Sustainable Development Goals (SDG), 2030 (Pearson, Degotardi, 2018). Goal 4 of SDG (Quality and Inclusive Education) is focused on the needs, rights, views, and contributions of children as they are the link to the future, but they are also the ones most at risk. UNICEF report (2018) on early childhood education mentions that one of the objectives of SDG of providing every child with at least one year of high-quality pre-primary education by 2030 is not being met by more than half of low- and lower-middle-income nations. Making ECCE educators and carers a transformative force, improving governance and stakeholder involvement, using the funding to guide ECCE development, developing systems for tracking and evaluating whole-child development, and energizing international cooperation and solidarity are some of the things it entails (Woodrow, 1999 and Sorin, 2005).

The National Education Policy (2020), therefore, placed a lot of emphasis on the early stages of learning and aimed to ensure special attention to stand-alone Anganwadis, Anganwadis co-located with primary schools, pre-primary schools/sections, and stand-alone pre-schools. Therefore, to initiate the challenging task of re-vitalizing the ECCE system, rigorous efforts for the designing of the National Curriculum Framework- Foundational Stage (NCF-FS), 2022 was carried out and certainly it came out to be a wonderful guiding document for the nation. In the document, the Foundational Stage consists of 3 years of Anganwadi/ preschool and 2 years of primary school for students aged 3 to 8 years (grades 1 & 2). It is believed that this transformative stage of education would qualitatively improve and change the children's lives in a favourable way for the future. All studies and research on early childhood development make it abundantly evident that delivering high-quality care and education at the initial phase of life benefits the individual by promoting brain development, improved learning outcomes, employability, and for the growth of the nation as a whole.

Some of the Salient Features of NCF-FS --2022

The wisdom and knowledge from many Indian traditions, as well as the gleaned insights from the experiences of early childhood care and education, have been magnificently incorporated by the National Curriculum Framework for Foundational Stage—2022 (NCF-FS--2022). It is based on adaptable, multi-level, play/activity-based, exploratory concepts that are more readily available, affordable, and more responsible in learning. As NCF-FS was created after a process of thorough consultation, targeted group discussions, opinions, and inputs from all over the nation, it contains well-thought and pragmatic recommendations. The policy document clearly reflects its primary goal 'to significantly improve the Indian educational system' by making congruent improvements to the curriculum, including pedagogy. The findings of multidisciplinary studies in the neurosciences, the study of the brain, and cognitive sciences have been referred to develop the curriculum and pedagogical approaches. For a thorough grasp of the function played by the body-mind complex in human experience and comprehension, it referred to the ancient Indian text known as "*Panchkosha*".

The framework discusses the five components of the "*panchakosha*" concept for children's education: *sharirik vikas* for physical development, *pranik vikas* for life energy development, *manasik vikas* for emotional and mental development, *bauddhik vikas* for intellectual development, and *chaitisik vikas* for spiritual development. It is believed that this non-dichotomous approach to human development, which offers distinct courses and direction, prepares today's generation for a better tomorrow. Additionally, NCF-FS address the fact that at the formative stage, children's learning needs to be encouraged by wholesome interactions with those who are close to them. Children's sense of security, optimism, curiosity, and communication abilities are all fostered through these interactions. The NCF used the play-way approach at the centre in relation to curriculum organization, pedagogy, time and content organization, and the overall experience of the child.

'Play' as the Central Theme of NCF-FS

It is universally accepted that children are natural learners, they learn naturally. And, playing is their natural tendency. They respond to new things with interest and are keen learners. They playfully inquire, investigate, experiment, and learn in order to make sense of the world. They pursue their interest and find new information by doing so. And, hence the best way for children to learn is via play. Children appreciate repetition, react impulsively to rhythm, and enjoy running, jumping, crawling, and balancing. They gain knowledge through hands-on manipulation, investigation, and experimenting activities.

This playfulness with objects, concepts, and ideas is taken as a central component of NCF-FS. By keeping playfulness, a central component in NCF-FS, it is anticipated that learning at this stage would be more active and engaging which would foster problem-solving, creativity, and flexible thinking in the children. Hence, different kinds of play were taken into consideration while developing the conceptual and operational understanding of the curriculum and its transactional approaches. A learning continuum that explores many degrees of engagement of teacher and child in the learning spaces highlighted free-play, guided-play, structured-play, outdoor-play, physical-play, exploratory-play, dramatic-play, fantasy-play, etc. The knowledge and experiences

of the children are stimulated by a variety of tools, artefacts, unrestricted artistic expressions, and open-ended activities, such as storytelling, reflection, poem recitation, art, craft, music, dance, nature walks, toys, and indigenous resources present in the immediate environment.

Curricular Goals

As guided by NEP–2020, the curricular goal of the Foundational stage is articulated on the broad aim of education, traditional and modern domains of development, and basic literacy and numeracy skills. The NCF-FS follows the pathway from educational aims to curricular goals, from curricular goals to competencies, and from competencies to learning outcomes. The Foundational Stage NCF consists of 13 Curriculum Goals broken down into 6 Domains. As a result, the framework’s professed curricular goal is for children to acquire positive learning habits along with physical, socio-emotional, ethical, cognitive, aesthetic, cultural, language, and literary development.

NCF-FS on Language

The power of language and the relevance of multilingualism is well addressed in NCF-FS. It is advised that children be exposed to numerous oral languages as early as possible, and the child’s mother tongue, native language, or another familiar language should serve as the primary medium of instruction because here is where children absorb things the fastest and most thoroughly. Also, reading and writing concepts are suggested to be first established through the mother language. In order to encourage learning and communication, interactive activities will also include poetry, songs, literature, theatre, and games. As per the framework, the same approach shall be used to build lateral reading and writing abilities in other languages. By the third grade, NCF-FS hopes to have students with independent reading and writing skills.

Teachers and NCF-FS

The “*Panchaadi*” 5-step learning process is suggested as a model for lesson design by the NCF-FS. *Adhiti* (introduction), *Bodh* (conceptual comprehension), *Abhyas* (practice), *Prayog* (application), and *Prasar* make up this process (expansion). Depending on the student’s interests, preferred languages, and other considerations, the teacher can arrange to divide the class into smaller groups. It is easy to observe how the

students are scaffolded in the basic level classrooms before being allowed autonomy. As a result, there will be positive interactions between the students, the teacher, and their peer group. A teacher can motivate the students by listening to them, having them role-play, asking questions, answering them, challenging them, looking into their answers, and giving them some degree of independence.

Balanced Literacy Approach

The ‘Balanced Literacy Approach’, highlighted by NCF-FS, focuses on both word recognition and meaning-making. It seeks to strike a balance between reading, writing, and speaking as well as between decoding problems and the use of whole sentences. It uses the four-block method to teach Literacy Instruction and Mathematics.

Learning Environment and NCF-FS

In the NCF-FS, special attention is given to the learning environment since it is seen as a third instructor. The NCF-FS places a strong emphasis on providing children with a positive and appropriate learning infrastructure and resources during their formative years. In the document, the mention of infrastructure, learning resources, and the pupil-teacher ratio has an institutional focus that works both at the individual level and through team efforts. Additionally, it talks about the culture, amenities, and setting that is conducive to learning. For content presentation, a project-based, story-based, and theme-based approach is recommended. Also, an eclectic approach and a mixed approach are equally stressed as all the approaches have their strengths and weaknesses. NCF-FS lays special emphasis on indoor and outdoor learning spaces. Running blackboard, circle, corner setups, classroom displays, and portfolio bags are the important components of indoor learning spaces and sand pit, clay box, water, kitchen garden with other outdoor play equipment are suggested as some of the relevant outdoor components.

Technology and NCF-FS

The proper use of technology for young children in the foundational stage is taken into account since variety in content, format, and access are crucial. With a focus on children’s digital rights, such as non-discrimination, survival and growth, the best interests of the kid, and respect for children’s

opinions, digital infotainment is examined. Such digital rights are also promoted by UNICEF and NDEAR to increase the interest and access of all children, including *divyaang* children.

Ecosystem and Learning

The framework emphasises how children actively engage in their social and cultural experiences and constantly adjust their beliefs and experiences to make sense of new information. And hence, children's learning at this stage must be supported by nourishing relationships with people around them as these connections foster a sense of security as well as their optimism, curiosity, and communication skills. The NCF-FS acknowledges the significant contribution of families, peers, communities, and other social, emotional, and physical aspects of the immediate environment that enable a systemic approach to the holistic development of the child. Also, for ensuring an appropriate learning environment, the NCF-FS discusses the design imagination, infrastructure, learning resources, and pupil-teacher ratio and has an institutional focus that works on individual as well as team efforts of all the stakeholders of education.

Assessment in NCF-FS

NCF-FS suggests that the nature and purpose of assessment at the foundational stage must be understood clearly and hence the assessment approach must be completely different from the other stages of education. Children may be assessed using anecdotal records, checklists, observation records, portfolios, worksheets, etc. As a result, it is important to gather evidence of learning, analyze that data, and act on the results through suggestive comments and follow-ups. Documenting and presenting the assessment results are crucial to the entire process, and instructors must be ready to accurately show students' progress using the Teacher Narrative Summary and Holistic Progress Card.

Learning Experiences

Since every child is unique, the learning experiences must also be planned in such a manner that it caters to the need of each and every learner. NCF-FS acknowledges that teachers must take cognizance of the fact that learning experiences are deeply connected with children's lives and their contexts. Therefore, it must be created using the children's prior knowledge. For this, getting to know each child as a unique individual is crucial.

Most of the time, learning issues are seen in children who have developmental delays and/or disabilities. The NCF-FS is aware of this and recommends using screening instruments to determine the child's unique issue and tailor interventions to it.

The linkage between the Stages

Since, NEP 2020 suggested a 5+3+3+4 design of education that needs to have continuity with the enriched content, changing pedagogy and assessment, proper linkage between the stages needs to be in place. NCF-FS mentions the linking up of the foundational stage with the preparatory stage to avoid the transitory challenges of the children. The framework will address the need for a gradual transition from Development Domains to Curricular Areas (subjects). Additionally, it is emphasized that for children to go smoothly from one stage to another, there should be a gradual transition from a child-led pedagogical investigation to a more regulated learning environment.

Conclusion

Early childhood interactions, actions, thoughts, and drawings are all intimately tied to young children's development of reading and numeracy, which begins in the first three years of life.

At this critical phase of early development, two essential skill areas—early literacy and early numeracy—emerge (birth to 8 years). In the framework of blended learning, the Ministry of Education, which will chair the Education Working Group (EdWG) under India's G20 Presidency, would support foundational literacy.

Undoubtedly, due to its many distinguishing characteristics, the NCF-FS stands out from other frameworks. These characteristics include terms like curriculum goals, decoding-encoding, pre-literacy, and numeracy, learning trajectories, emergent literacy and numeracy, developmental goals, total physical response, integrated learning, holistic progress card, spatial skills, subitizing, whole language approach, balanced approach, and mapping competencies, among others. NCF-FS (2022) not only provides the guiding principles for foundational stage teaching-learning aspects but also to the Teacher Education programmes of India. The document recommends the necessary changes that need to be made to

the pre-service and in-service teacher education programmes. Additionally, the mapping of the fundamental stage competencies for NIPUN Bharat and NCF is nicely carried out, and this framework is anticipated to provide high-quality foundational education in India. This framework can be used as a reference by parents to evaluate the quality of early childhood education programmes before enrolling their children. Now, parents can use their right to evaluate a school's quality before applying for their child's admission.

This 350-page National Curriculum Framework document covers a wide range of themes, all of which are strongly supported by empirical research. These themes include curricular objectives, competencies, learning outcomes, pedagogy, selection of subject matter and instructional materials, assessment, learning environment, supportive eco-system, inclusion, technology utilization, and teacher preparation. The NCF-FS (2022) puts a lot of focus on the potential contributions that communities, academic and administrative staff, and parents can make to support the desired developmental outcomes in the modern world. It is envisaged that all types of institutions across the country would adopt this framework to deliver the best possible foundational education.

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Chat GPT : A Game Changer in Higher Education

Karunesh Saxena* and Seema Sharma**

The globe has been captivated by Chat GPT (Generative Pre-Trained Transformer), the artificial intelligence (AI) chatbot. Chat GPT is an innovative artificial language model. With the help of it, anyone may communicate with the chatbot in a variety of ways that are human-like. The chat GPT model may help with many things like writing emails, articles, and code as well as providing answers to inquiries (Liu et al., 2021). Regarding Chat-GPT and AI, everyone has an opinion -engineers and businesspeople view it as a new frontier—a brave new world where they may create new goods, services, and solutions. Journalists and social scientists worry about it, calling it an “information warfare machine”. Chat GPT has been used for a variety of applications, including customer service, chatbots, and personal assistants. However, one area where Chat GPT can have a significant impact is higher education. This article discusses the potential benefits and some of the significant flaws in the current Chat GPT version. In addition, this article discusses the limitations of using Chat GPT in higher education and explores how it can be used for research purposes. Taking this context into consideration, an endeavor has been undertaken.

- To trace the genesis of Chat GPT
- To discuss the applications in different fields
- To explore the uses of Chat GPT in Higher education
- To discuss the Strengths & Weaknesses of using chat GPT in Education

The Genesis

Open AI, one of the top artificial intelligence (AI) research organizations in the world, created the cutting-edge language model ChatGPT. This research firm was launched by Sam Altman, Elon Musk, Greg Brockman, Ilya Sutskever, and Wojciech Zaremba in 2015 in San Francisco. The first version of ChatGPT, GPT-1, was released in 2018; GPT-2 and GPT-3 followed in 2019 and 2020, respectively. Open AI

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also launched the most advanced version GPT-4 in 2022. This Open AI lab has made quick strides in the creation of AI technology and made DALL-E and ChatGPT available to the public for machine learning. Early in 2022, DALL-E, a machine learning system that creates innovative graphics depending on user inputs, attracted a great deal of public interest. The most cutting-edge and commonly utilized version to date is GPT-3, with each successive release being an enhancement over the one before it. Chat GPT-3 revolutionized the world by creating 100 million (10 crores) users in just 2 months after the launch. It can comprehend and produce human-like language in a variety of contexts thanks to training on a vast dataset of over 45 terabytes of text.

Chat GPT-What it Entails

Chat GPT uses a method of deep learning, that involves teaching a neural network to learn from a large quantity of data. The Chat GPT neural network is made up of several artificial neuronal layers that cooperate to comprehend the structure and patterns of language. The model learns the patterns and connections between words and phrases by being trained on a big corpus of text data. To enhance the ideas underpinning GPT, a two-stage procedure is used: a) generative unsupervised pre-training using unlabeled data, followed by b) discriminative supervised fine-tuning to boost performance on certain tasks. (Erhan et al., 2010; Budzianowski & Vulić, 2019) In contrast to the fine-tuning phase, which is more supervised and regulated by the authors, the model learns organically during the pre-training phase, much like a human might learn in a new situation. Modern language models created by OpenAI (GPT), Google (BERT), and Microsoft (XLNet) all are state-of-the-art language models and are based on GPT-3 architecture. Large volumes of text may be processed by these models, and they can be trained to excel at tasks requiring natural language processing. Specifically, the GPT-3 model is the biggest language model yet trained with 175 billion parameters. The model learns how to carry out tasks using natural language processing and produce content that is well-written and coherent from this text. GPT can be employed to carry out a variety of activities after proper training.

Ultimately by using reinforcement learning which is based on human feedback and supervised fine-tuning procedures models are pre-trained to generate appropriate responses. For reinforcement learning, different reward models are created.

As it is said that GPT is “transformer” which is based on the transformation process. This process of “Transformation” is a data processing technique done on groups of components, such as words in a phrase or letters in a word. Additionally, “transformers” are machine learning models that have been explicitly created to use transformations to handle sequences of elements. The architecture of the transformers is built on the application of attention, a method that enables the model to focus on certain elements of the input sequence at various points while processing the sequence. This improves the efficiency and accuracy of the transformers’ information processing and natural language processing operations. By using this architecture, natural language processing activities may be completed with great efficiency. Following figure 1 shows the architecture of Chat GPT using the transformation process.

Figure-1 is depicting the “*Instruct GPT model*” which has been a standard within Open AI

large language models. It optimizes conversational capabilities & improves on top of the existing GPT model. It’s all about how Chat GPT works, now in the next section its applications are discussed. By simply using the following steps anyone can easily exceed the chat GPT:-

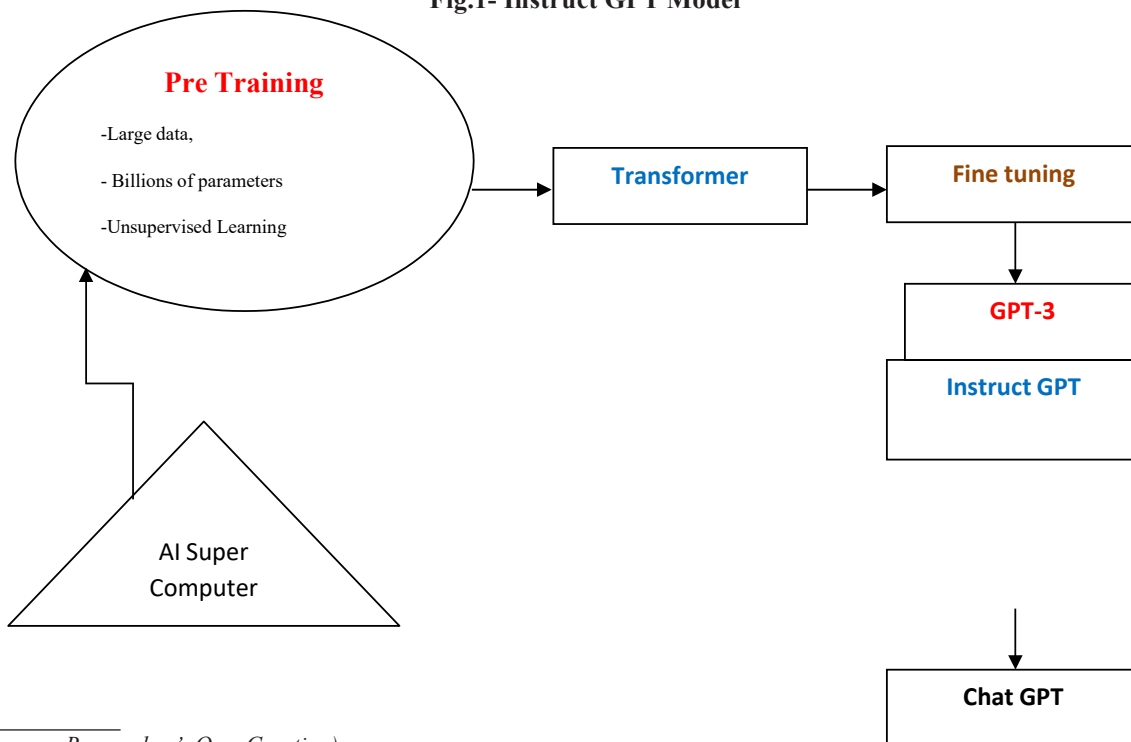
- **Step 1:** - Open the URL <https://openai.com/blog/chatgpt> (in a new window)
- **Step 2:** -Sign up to open an AI account using your email address.
- **Step 3:** -Login to open an AI account.
- **Step 4:** -At the bottom of the screen a type box can be seen on the interface of chat GPT.
- **Step 5:** -Write anything to start chatting with chat GPT.

Thus, by using the above-mentioned steps anyone can easily assess it and can get amazing responses to their queries.

Applications

It has numerous applications in different areas including customer service, education, healthcare, and entertainment. It enables the personalization

Fig.1- Instruct GPT Model



(Source: - Researcher’s Own Creation)

and responsiveness of customer service offered by chatbots and virtual assistants. Additionally, it may be applied to social media analysis, content development, and language translation.

From Table-1, it is very clear that Chat GPT has maximum applications in the field of higher education. Therefore, an attempt has been made to present the uses of it in higher education. Chat GPT in Higher Education: - Chat GPT can be a helpful resource in education in several ways like for students it can assist in homework and research work and can help in improving writing and language skills. It has already gained significant attention in the domain of academia and research very recently. Other ways to utilize it are: -

- a) **Chat GPT as Coder-** It can write codes in different languages in seconds.
- b) **Chat GPT as a Writing Assistant-** GPT can generate coherent and contextually relevant text, making them useful for content generation tasks such as writing articles, blog posts, social media

captions, product descriptions, and personalized emails. Chat GPT can assist in automating content creation processes and saving time for content creators.

- c) **Chat GPT as AI Artist-** Chat GPT can assist in generating artistic content, it may not possess the same level of creativity, originality, or aesthetic judgment as human artists. However, it can serve as a valuable tool for ideation, inspiration, and collaboration, pushing the boundaries of artistic expression in conjunction with human creativity.
- d) **Chat GPT as New Google-** Chat GPT can provide information and answer questions based on its pre-trained knowledge. Users can ask questions, seek explanations, or request specific details, and the model will generate responses based on its training data. While it may not have access to real-time information like Google, it can provide relevant and informative responses based on its existing knowledge.

Table 1: - Applications of Chat GPT in Different Domains

Work Area	Application	Technique	Results
Software development	Software testing by evaluating responses of chat GPT to testing questions.	Typed questions related to the software testing course	Only 37.5% were answered correctly.
Translation	Evaluating the ability of chat GPT in translating languages	To compare the responses of it, different standardized tests were used.	A good translation of European languages but lags behind on distant languages.
Healthcare	Supporting decisions and improving efficiency in Radiology, Urology, and Ophthalmology	Questions asked related to different diseases and diagnoses and medicine recommendations.	Evaluators found 59.5% accuracy in diagnosis and recommendations.
Scientific research	Writing scientific and academic papers. Summarizing and translating non-English papers	Discussed different papers that used and listed Chat GPT as the author	Logical writing style and speed up research work but has different ethical issues.
Reasoning	Examine the responses of it on different reasoning tests	The proposed framework of multimodal reasoning of different language models.	Performed well on deductive reasoning but not on inductive reasoning
Journalism and misinformation detection	Evaluate responses of chat GPT on conspiracy statements and misinformation	Performed a descriptive study on responses of it to various COVID-19 vaccine topics	Identified misinformation but dismissive of conspiracy statements.

Source: Adapted from:- Shahriar & Hayawi, 2023

e) **Chat GPT as an App Developer-** GPT models can be used for creative purposes such as generating poetry, storytelling, scriptwriting, and creating artwork. They can assist artists, writers, and creatives in generating ideas and Social Media content.

To give the readers an idea about how Chat GPT generates the responses, researchers have asked some questions about it and some amazing responses from Chat GPT are quoted in exhibit1 & 2 regarding its use in academia & research.

Here exhibit 1 is showing that the researcher asked to chat GPT about and its use in education and this interesting answer was given. In exhibit 2, researchers asked the second question about ethical issues associated with its use in research, and chat GPT has given a detailed reply mentioning various ethical issues of its use in research. According to Chat GPT responses, researchers can use it to analyze large amounts of text data, such as academic articles and research papers. Chat GPT can also be used to generate synthetic data, which can be used for machine learning and natural language processing research.

By analyzing the responses of Chat GPT it is observed that its responses are very engaging, logical

and free of errors. Other strengths of utilizing the chat GPT in education are:-

- **Time-saving:** - Chat GPT provides quick answers to all queries in seconds.
- **Handling of context & unstructured data:** -It can maintain multiple contexts & can handle large unstructured data at ease as it is trained on a large corpus of text.
- **Language Correctness:** - GPT has an excellent comprehension of the subtleties of human language since it was trained in a big collection of text. This enables it to provide replies that are more like those produced by rule-based systems and that are more natural and human.
- **Flexibility:** - Chat GPT has enormous applications in education like summarizing & paraphrasing text, generating unique ideas for essays, running spell & grammar checks, writing emails & generating practice questions for tests. This implies that it may be used to create a wide range of chat apps, including personal assistants and customer support bots.

Weaknesses

Despite showing numerous interesting &

Exhibit 1- Response to the Author's Question

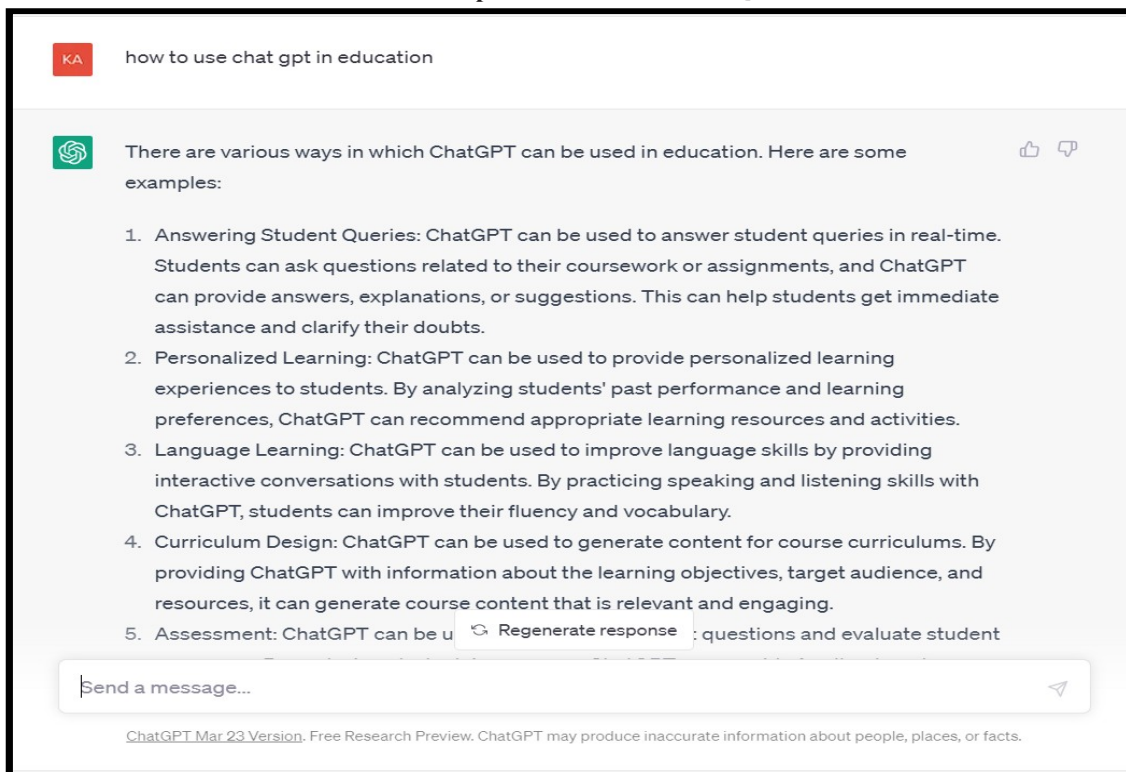
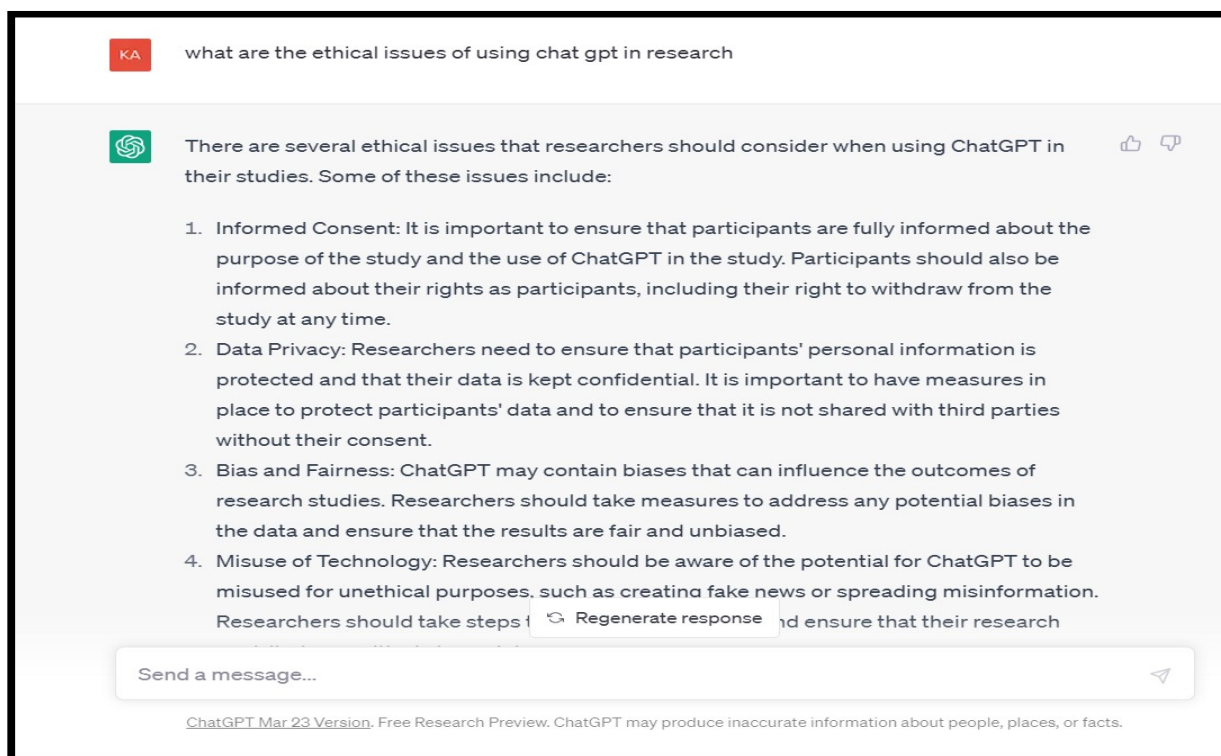


Exhibit 2:-Response to the Author's query regarding its use in Research



convincing abilities, chat GPT also has many limitations. Sometimes it makes errors in simple reasoning & mathematics problems, for instance, it scored 48% in the UPSC exam. A week ago, Live Mint reported in Hindustan Times that chat GPT received a negative score & was able to solve only 11 questions in JEE Advance exam. This shows that there are some concerns about the possible dangers and moral ramifications of employing ChatGPT, as there are with any AI technologies.

- The likelihood of bias in the data used to train the model is one of the main worries since it might lead to biased replies or support negative preconceptions.
- As it is trained on data up to September 2021, so its responses are not so appropriate.
- Furthermore, there is a chance that bad actors may use technology to disseminate false information or carry out damaging actions.
- In addition, it lacks common sense like humans and develops threats to human jobs.
- The most futuristic disadvantage of using chat GPT is the increased dependency of humans on technology which will lead to the deterioration of human intelligence.

Way Forward

In conclusion, due to its numerous features, OpenAI's ChatGPT is swiftly gaining popularity. Chat GPT is a strong and creative AI language model with the potential to transform the way humans communicate and engage with technology. Its powerful natural language processing and synthesis skills have a wide range of practical applications in a variety of sectors. However, it is critical to utilize this technology properly, keeping possible hazards and ethical consequences in mind. In this article, the authors have suggested "Responsible Use of AI-based-Chat GPT" in education. With the help of chat GPT teachers in the present scenario can develop engaging classroom activities to make the teaching-learning process more interesting. All in all, Chat GPT has the potential to transform higher education by providing personalized feedback and support to students, improving accessibility and inclusivity, and creating more engaging and interactive learning experiences. While there are some limitations to using Chat GPT, recent news shows that it is increasingly being used in higher education. Furthermore, Chat GPT can also be used for research purposes, which can have significant implications for the field of natural language processing and machine learning. □

Educational Neuroscience: Implications for the Future

K Chellamani* and Thamizhiniyan K**

We are in the transition period shifting the focus of our education system as per the National Education Policy –2020 (NEP--2020). It is learner-centric as well as designed for developing future global citizens. It focuses on “moving the education system towards real understanding and towards learning how to learn - and away from the culture of rote learning as it is largely present today. The aim of NEP--2020 is not only cognitive development but also building character and creating holistic and well-rounded individuals equipped with the key 21st century skills. It calls for revamping the entire curriculum and pedagogy for learners to apply critical thinking and get solutions for problems, develop creative and multidisciplinary attitudes, be innovative, and adaptive, and absorb new material in novel and changing fields. Accordingly, the pedagogy must evolve to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, flexible, and, of course, enjoyable. In a nutshell, NEP--2020 stresses Integrated Education, and Holistic Development of the learners and wishes the education system to move towards learning how to learn.

A quick analysis of UNESCO reports on education reveals that in all the ways, NEP--2020 is attuned with insights from global perspectives. Nearly for five decades, quality education for a sustainable future has been reinstated in all educational commission reports and policy frameworks, universally.

The Faure report (1972) *Learning to Be: The World of Education -Today and Tomorrow* says, “Human sciences are often particularly neglected. Generally speaking, most education systems do not help their clients—whether they be youngsters or adults- to discover themselves, to understand the components of their conscious and unconscious personalities, the mechanisms of the brain, the operation of the intelligence, the laws governing

their physical development, the meaning of their dreams and aspirations, the nature of their relations with one another and with the community at large. Education thus neglects its basic duty of teaching men the art of living, loving and working in a society which they must create as an embodiment of their ideal” (pg.65-66).

The famous Délor’s Report - *Learning: The Treasure Within* (UNESCO,1996) says,“ Better still, the school should impart both the desire for, and pleasure in, learning, the ability to learn how to learn, and intellectual curiosity. One might even imagine a society in which each individual would be in turn both teacher and learner” (pg.17).

The beginning of 20th century was looked upon as changing environment and the UNESCO started rethinking the future. There is transformation everywhere in the society and hence education must also change. And UNESCO believes that Education is the key to the global integrated framework of sustainable development goals. According to the report,“ Rethinking Education for the Future (2015), “Education is at the heart of our efforts both to adapt to change and to transform the world within which we live. A quality basic education is the necessary foundation for learning throughout life in a complex and rapidly changing world. It insists on Learning to learn and the development of competencies”. It addresses the significance of conducive learning environments and appropriate approaches in teaching for safeguarding justice, social equity, and global solidarity toward sustainable development. The report underlines new knowledge horizons as, 1) Cyber world, 2) Advances in the Neurosciences (pg. 27), 3) Climate Change, 4) Creativity, and 4) Cultural Innovation and Youth. From an overview of the education reports, it is inferred that teachers need to update theories of learning based on biology, psychology, philosophy, and sociology perspectives.

Dewey (1896) proposed the establishment of Laboratory schools to strengthen education amalgamating research with practice in schools. He insisted on formative evaluation and democratic feedback. The disappointing fact is that his vision has

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never been realized. There is no framework designed to monitor and get feedback on the effectiveness of teaching and learning. Kurt W. Fischer (2009) in his paper, “Mind, Brain, and Education: Building a Scientific Groundwork for Learning and Teaching” elaborately discusses on assessments of real school performances. He strongly insists on the collaborative efforts of researchers, teachers, and students working together in examining the effectiveness of many aspects of learning and teaching in the context of schools (curricula, school arrangements, classroom types, etc.).

In the early 20th century educationists in Paris, Tokyo, Cambridge, and Massachusetts showed interest in bringing biology and cognitive science into a close relationship with education, to promote profound knowledge of teaching and learning, and thereby Mind, Brain, and Education movement started. Consequently, publications came out of the project on Learning Sciences and Brain research at the Council on Educational Research and Innovation of the OECD (2002, 2007). In Tokyo, Hideaki Koizumi and others launched a movement to connect Biology with education, eventually creating the Baby Science Society of Japan and launching a series of learning and development in Japanese children (Goswami, 2004). In Cambridge, Kurt Fischer, Howard Gardner, and others started a training program for graduate students interested in connecting biology, cognitive science, and education, which was named MBE, building on the foundations of the Mind, Brain, and Behavior, Interfaculty Initiative that had started at Harvard (Blake & Gardner, 2007; Fischer, 2004). Parallely, a series of conferences on Learning and the Brain (mostly in Cambridge) was organized by Anne Rosenfeld, Kenneth Kosik, and Kelly Williams to enlighten teachers on neuroscience and genetics as they relate to educational issues.

The educationists and scientists from Cambridge, Tokyo, and Paris started collaborating and founded the International MBE Society. It is followed by the launch of the journal *Mind, Brain, and Education*. Consequently, programs were initiated to train educators and researchers to relate biology and education at the University of Cambridge (Goswami, 2006), Dartmouth University (Coch, Michlovitz, Ansari, & Baird, 2009), the University of Texas at Arlington (Schwartz & Gerlach, 2009), the University of Southern California (Immordino-Yang, 2007), Beijing Normal University,

and Southeast University in Nanjing, as well as the original MBE program at Harvard and continuing activities in Tokyo and Paris.

It is found that ‘brain-based education’ is commercialized and is built on scientifically inaccurate myths. The MBE movement moves forward on, “(a) a skeptical approach to brain-based claims and that we move forward (b) systematic collaborative work that relates biological and psychological knowledge to education and that connects teachers and students with researchers, and (c) long-term improvement of the infrastructure for creating scientific knowledge that relates to education. If the field can move in these directions, then we can begin to use research tools, such as brain imaging, analysis of cognitive processing and learning, and genetics assessment to illuminate the “black box” and uncover underlying learning mechanisms and causal relations” (Hinton & Fisher, 2008).

Educational neuroscience is cognitive neuroscience that investigates educationally inspired research questions (Bruer, 2016). Over the past 30 years, the scientific study of the human brain has grown significantly, and it has revealed great scientific inputs about how learning works in the brain. Such research has sparked a revolution in education that might change how classes are run. In reality, research from cognitive neuroscience that may be pertinent to education has been examined and debated in a number of journal publications (Ansari & Coch, 2006; Blakemore & Frith, 2005; Goswami, 2004, 2006; Posner & Rothbart, 2005; Stern, 2005).

Wherever Cognitive neuroscience has connections with education, or may lead to applications in educational practice and policy—pedagogy and curriculum—is known as educational neuroscience. This is because science deals with a problem or issue in education. Consideration of concerns regarding the overall design of learning settings, the scheduling of teaching, and the functions of stress, nutrition, sleep, and social context in learning are also included in Mind, Brain, and Education. The interactions between education and neuroscience may also aid in comparing the advantages of science- and arts-based education, altering our perception of educational priorities.

To put it another way, educational neuroscience refers to cognitive neuroscience that is pertinent to, has implications for, or might be used in pedagogy

and curriculum as well as educational practice and policy. The issues with educational policies and practices will be addressed through cognitive neuroscientific research inquiries. The idea that a neuroscientific knowledge of children’s learning may improve teachers’ professionalization is a fundamental one. Better knowledge should lead to more effective and pleasurable learning, which should improve the teaching experience for educators. Studies in educational neuroscience suggest that enduring practice so-called craft knowledge—may be supported. This also demands major changes to educational practices.

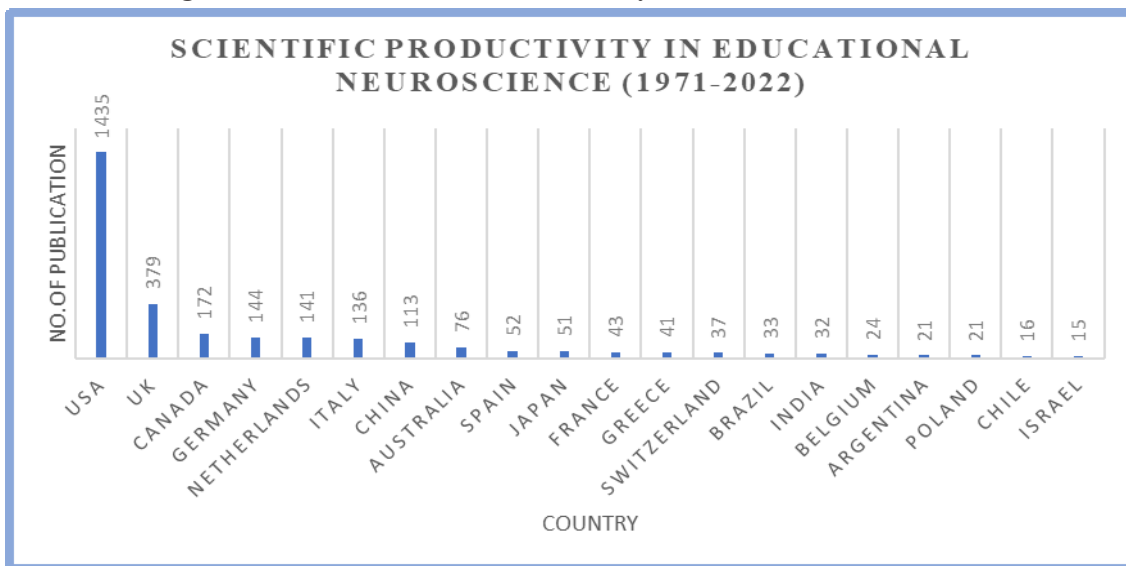
The various approaches educators can use to address a specific issue they are having with students should be discussed with cognitive neuroscientists. Thus, these new insights will offer detailed and nuanced descriptions of classroom instruction and learning (Coach & Ansari, 2009); Ansari & Coach, 2006). As envisioned by NEP---2020, this will make it easier for new interdisciplinary and multidisciplinary academics to address the difficulties and issues faced by the instructors in the classroom. As a result, teacher training programmes must incorporate cognitive neuroscience courses into their curricula or incorporate cognitive neuroscientist methodologies and discoveries into their existing courses. These courses ought to cover not only the fundamentals of structural and functional brain development as well as the neural systems underlying fundamentals of cognition, like the normal and abnormal development of reading

and math skills, but also more general issues that are pertinent to education, like the influence of culture and brain function.

The introduction of research methodologies, the benefits and drawbacks of behavioural approaches, and techniques that gauge brain activity should also be a part of teacher preparation programmes. Critical thinking skills are essential, especially in light of the abundance of ‘neuromyths’ in publications geared towards teachers (Goswami, 2004) and the need to critically assess scientific findings and how they are presented in the media. Strong ties between disciplines can only be established if teachers acquire “neuroscience literacy” and cognitive neuroscientists acquire “educational literacy”.

In India, Neuroscience is approached as a clinical subject, and undergraduate and postgraduate course, and nowhere it is taken seriously as the MBE (Mind, Brain, and Education) movement works. Hence, it is significant to start integrated programs on Educational Neuroscience with the objectives of MBE. If it is established with all laboratory tools in Indian Universities, it will have greater positive implications on teaching and learning. The reality indicates the need for teachers to have an awareness of neuroscience-based education and its significance. It is mandatory for teachers to know what science has revealed about learning and development at various levels of analysis and from different points of view in order to comprehend and better assist human learning and development in their students. An in-

Figure 1: Global Publication Productivity in Educational Neuroscience



depth search on the web, on educational neuroscience courses both at national as well as international level brings to our awareness the existence. Research is a major concern for any development. A comparative account of scientific productivity in Educational Neuroscience is provided in Figure-1.

Figure-1 illustrates that the top twenty countries that have been participating in Educational Neuroscience research and have produced scholarly articles have been indexed in the Scopus Database. India is ranked fifteenth among the top twenty productive countries, and the current NEP—2020 has made a positive note on Neuroscience, and India requires systematic planning, and funding to introduce Educational Neuroscience courses in Teacher Education Programmes, which is urgently needed to strengthen our nation with brain-based education and compete with global players in Neuroscience Education. Foreign universities began luring Indian students for Educational Neuroscience Programmes every year. The moment has come to incorporate Educational Neuroscience courses into Teacher Education Programmes in Indian Higher Educational Institutions (HEIs). Figure 1 depicts the data retrieved from the Scopus database on the 1st of January 2023, on quantitative analysis of country ranking.

The trend topic analysis of Author Keywords in global Educational Neuroscience research is

shown in Figure 2. It outlines that teacher education is the trending topic in the field of Educational Neuroscience since 2022 and that since 2015, global educational neuroscience researchers have focused more on teacher education-related variables such as cognitive neuroscience, neuromyths, educational neuroscience, learning styles, neuro-education, teachers, learning, and so on. This number clearly shows that Teacher Education is a hot issue in worldwide Educational Neuroscience research, and India must academically follow the global research and publishing pattern. If this is the case, India may soon attract international students for Educational Neuroscience degrees in Teacher Education. Figure 2 is the outcome, of the data retrieved from the Scopus database on the 1st of January 2023, of quantitative analysis of trend topics based on the author’s keywords.

The leading international universities that offer M.Sc. and Ph.D. programmes in educational neuroscience in the school or department of teacher education are shown in figure 3. In order to equip teachers with Mind & Brain-based teaching approaches and to improve students’ learning techniques, higher education institutions in developed countries have been effective in incorporating neuroscience into teacher education fields. In order to benefit teachers, students, and society as a whole, India needs to integrate neuroscience into

Figure 2: Trend Topics in Educational Neuroscience

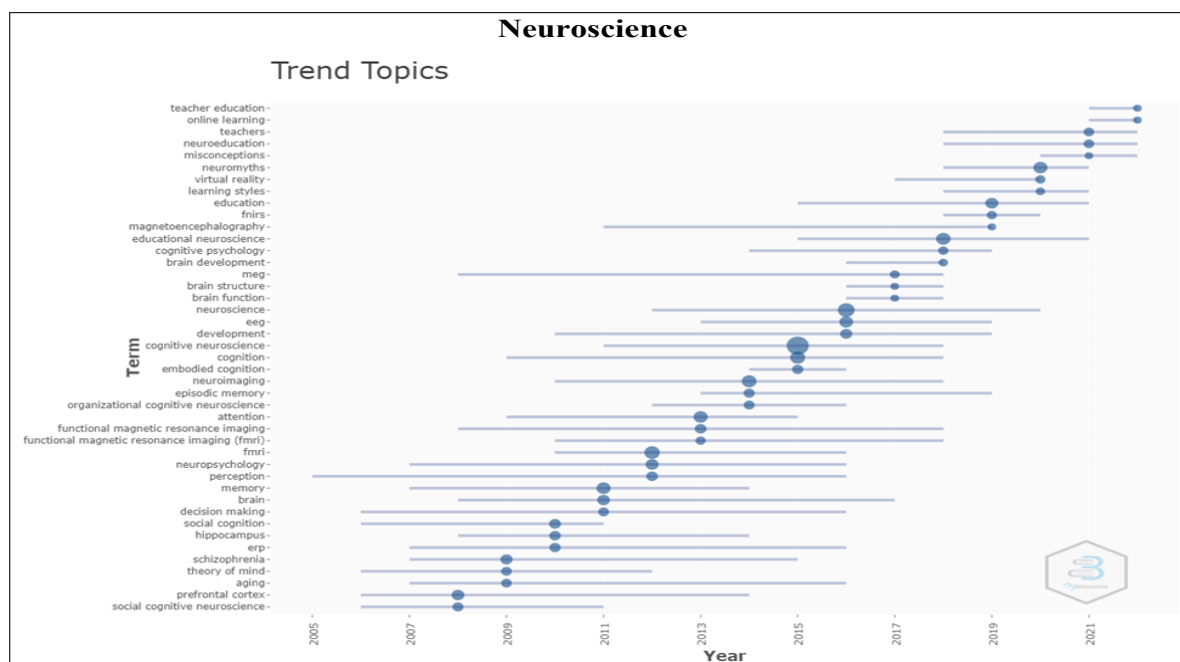
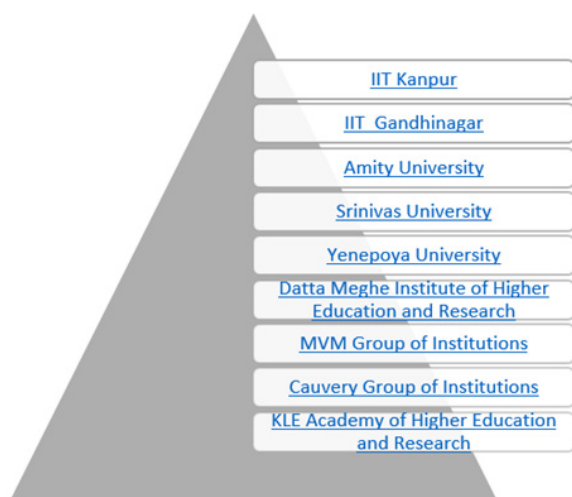


Figure 3: Global Universities Offering M.Sc. /Ph.D. in Educational Neuroscience in Teacher Education Field

University of California	Harvard University	Gallaudet University	University College London	CQ University Australia	Vrije Universiteit Amsterdam
University of London	University of Bristol	University of New England	Columbia University	University of Calgary	University of Portland
University of Lethbridge	Philipps Universität Marburg	Vanderbilt University	La Sierra University	Universiteit Leiden	UTA College of Education
	University of Nebraska–Lincoln		The University of Melbourne		

its educational programmes for the preparation of future educators.

Figure 4: Institutions Offering B.Sc. Neuroscience Programs in India



In India, eight universities provide B.Sc. programmes in neuroscience and neuroscience technology, while two universities offer B.Sc. programmes in cognitive science. The first IIT to have a full-fledged Cognitive Science department is IIT Kanpur. By comprehending, replicating, and adapting the complexity of the human mind's perception and processes, the Department of Cognitive Science will be at the forefront of developing futuristic technology.

In India, 13 Universities provide M.Sc. programmes in cognitive science and neuroscience. 11 institutions provide Ph.D. programmes in cognitive science and neuroscience. Graduates of the M.Sc. in Cognitive Science programme at IIT

New Delhi have a wide understanding of human thought, behaviour, and emotion. A wide range of businesses, including education, healthcare, mobility, product design, and technological advancements, can benefit from the insights. The Centre for Cognitive and Brain Sciences is located at IIT Gandhinagar. Intriguing and interdisciplinary M.Sc., Ph.D., and minor programmes in cognitive science are offered by the Centre. The programme enables the investigation of issues relating to the mind, brain, and cognition. Doctoral and Masters's Programmes in Cognitive Science are offered at the University of Allahabad's Centre for Behavioural and Cognitive Science. It carries out research in a variety of behavioural and cognitive science fields and also starts outreach initiatives. The M.Sc. Ph.D integrated programmes offered by Gurugram University's Centre for Cognitive Science are designed to give students a strong foundation in inter-disciplinary cognitive science fundamentals and to prepare them to do research utilizing a variety of approaches furthermore hold an M.Sc. in Neuroscience for the advancement of skilled manpower with a thorough understanding of the different aspects of neuroscience.

The National Curriculum Framework (NCF2023) is designed on the aims and commitments of the NEP. It says that "Education is deeply rooted in India. This is in content and learning of languages, in the pedagogical approaches including tools and resources, and most importantly in the philosophical basis – in the aims and in the epistemic approach". It underlines the essentiality of teacher understanding of learning on the basis of Neuroscience.

On browsing the document, the word Neuroscience is visible in three contexts, the word 'Brain' comes in 14 pages and the word 'Mind' comes in 71 pages. Here I have given a glimpse of illustrations from NCF--2023 to understand the necessity for teachers to have knowledge of educational neuroscience (Table-1).

NEP--2020 has taken up its vigorous implementation at all levels of Education in India. Recently, the University Grants Commission (UGC) announced the Four-Year Undergraduate Programme (FYUP) to be adopted in all Higher Education institutions from the 2023-24 academic session. The UGC Chairman Prof. M. Jagadesh Kumar suggests

Table-1: Significant Points of National Curriculum Framework –2023 on Educational Neuroscience.

Neuroscience	<p>Children can scan patterns actively and display a growing capacity for remembering in ways that current neuroscience is still exploring. (Pg.39)</p> <p>Research from neuroscience informs us that over 85% of an individual’s brain development occurs by the age of 6, indicating the critical importance of appropriate care and stimulation in a child’s early years to promote sustained and healthy brain development and growth. (pg.103)</p> <p>There has been a long tradition of inquiry both in India and in other cultures on the various domains of development that have been observed in young children that are both natural and desirable. The <i>Panchakosha</i> concept in the <i>Taittiriya Upanishad</i> is one of the earliest articulations of the different domains of development of the human being. These descriptions remain relevant along with the more modern understanding that has emerged through Developmental Biology, Psychology, and Cognitive Neurosciences (Pg.110).</p>
Brain	<p>NCF--2023’s pedagogical approaches are on, “How do children grow and Learn”? Significant Sentences are selected and highlighted below:</p> <p>Research from neuroscience informs us that over 85% of an individual’s brain development occurs by the age of 6, indicating the critical importance of appropriate care and stimulation in a child’s early years to promote sustained and healthy brain development and growth.</p> <p>These descriptions remain relevant along with the more modern understanding that has emerged through Developmental Biology, Psychology, and Cognitive Neuroscience(Pg.110).</p> <p>The brain plays an important role in learning.</p> <p>Hence students must be taught a few things early on like organising their thoughts for better clarity, the art of raising relevant questions, brainstorming, and thinking aloud, active participation, and skills of literary appreciation.</p> <p>Research suggests strong links between arts training and overall brain development. Exposure to art and the experiences of producing art help with improvement in cognition and significantly impact individuals in their emotional awareness and regulation (295).</p> <p>Some Buddhists deny that there even is such a thing as the self and argue that this illusory belief in <i>ātman</i> is the source of all suffering. In the contemporary context, these debates about the self, end up being debates about personhood, the mind, and the brain. In this course, we will, once again, see how these ancient debates about the self can help us think about current issues around the mind, consciousness, and artificialintelligence.</p>
Mind	<p>Throughout, we will focus on arguments for and against each of these views as well as thinking about the social and ethical implications of these various stances on the nature of the mind or self.</p> <p>Health and Well-being: A healthy mind and a healthy body are the foundations for an individual to pursue a good life and contribute meaningfully to society. School education should be a wholesome experience for students, and they should acquire capacities and dispositions that keep their bodies and mind healthy (Pg.24).</p> <p>Child development is influenced by the interplay of three different processes namely biological processes, cognitive processes, and socio-emotional processes. Biological, cognitive, and socio-emotional processes are intricately interwoven with each other. Each of these processes plays arole in the development of a child whose body and mind are interdependent (pg.37).</p> <p>Sri Aurobindo also lays central importance on concentration and speaks of four principal methods by which concentration can be attained - meditation, contemplation, witnessing the passage of thoughts as they pass through the mind, and quietening and silencing the mind.</p>

that according to NEP--2020 the higher education system should enable an individual to study one or more specialized areas of interest at a deep level and also develop capabilities across a range of disciplines, including sciences, social sciences, arts, humanities, languages, as well as professional, technical, and vocational subjects. The structure of the curriculum is designed for the holistic development of the learners demanding the teachers have knowledge and understanding of neuroscience in their teaching. It is the need of the hour that educational institutions and universities should opt for creating innovative Educational Neuroscience programmes.

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Podcasting: Understanding the Industry and Its Applications in Business Education and Personal Branding

Yukti Khajanchi* and Aamir Munshi**

The Podcast, a name originating from a portmanteau of “iPod” and “broadcast”, was first coined in 2004 by Journalist Ben Hammersley of the British Broadcasting Corporation (BBC) and The Guardian. Despite being a feasible form of content even during the age of MP3 players and early broadband connections, the format has only really hit the mainstream in recent years. It’s hard to explain why, but most experts point to increased mobility, better production value, and a group of content creators that have recently managed to capture the imagination of the broader public. Regardless, in recent years, the podcasting space has boomed to new levels of popularity.

Further, the advertising market for podcasts is growing as well. In 2015, the ad market for podcasts was \$69 million—but by 2017, the market was triple the size at an estimated \$220 million. Podcasts allow advertisers to tap into very specific audience psychographics, and podcasts offer higher CPMs (\$25-45) for successful publishers than traditional online content (\$1-\$20).

Aside from allowing new types of content to blossom outside of traditional distribution channels, podcasting has one other defining characteristic: mobility. Just as streaming does for video, podcasts allow audio to be played in many situations where it was previously less feasible for a user to curate content.

In fact, people listen to podcasts the most while driving (52%), traveling (46%), walking, running, or biking (40%), commuting on public transportation (37%), and working out (32%). And if podcasting content keeps getting better, people may even opt to listen in at other times outside of travel, building out the medium to even bigger heights.

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Pros and Cons of Podcasting

Advantages

- Unlike other forms of media, listeners tend to give podcasts exclusive attention and time. Listeners tune in during workouts, commutes, and other slices of free time. Other forms of media, such as blog posts and videos, are subject to many distractions.
- Edison Research’s report also discovered that those who listen to podcasts, listen to podcasts more than any other form of audio, including AM/FM radio and own music. Creating a quality podcast will help build a loyal base of listeners that will keep coming back for more.
- Podcasting’s exclusivity isn’t just limited to time. Unlike broadcast media, a listener of your podcast will not hear messages from your competitors. When they tune into your show, they’re tuning in to you only. For marketers in fiercely competitive industries, this can cement loyalty to your brand.
- As a form of digital media, we can measure podcast listenership with more accuracy than non-digital audio. We can track the number of downloads of individual episodes as well as subscribership to our shows. This level of accuracy allows us to see the immediate impact of our efforts.

Disadvantages

- Podcasting has many benefits, but those benefits aren’t free. Putting together a podcast requires time, money, and significant labor.
- As a form of media, a podcast must be delivered on a regular schedule. Mainstream media has conditioned listeners to expect content delivered on a predictable, frequent basis, as often as weekly. The publication schedule must mirror those expectations, and podcast production demands time. For every minute of podcast audio that the listener hears, expect to spend between 5-15 minutes of your time producing it.
- Podcasting needs more equipment and resources than other forms of content marketing. To produce a quality podcast, a microphone, audio editing

software, and podcast hosting services are required. That's just for the production of the podcast; we will also need marketing services on top of the production services. For example, if we need to market the podcast like a product, it requires to:

- Develop an editorial calendar and marketing plan;
- Put up a dedicated landing page or website;
- Create marketing collateral such as email newsletters promoting the show; and
- Set up cross-promotion in App Stores and content networks such as Google Play, iTunes, and Stitcher Radio.

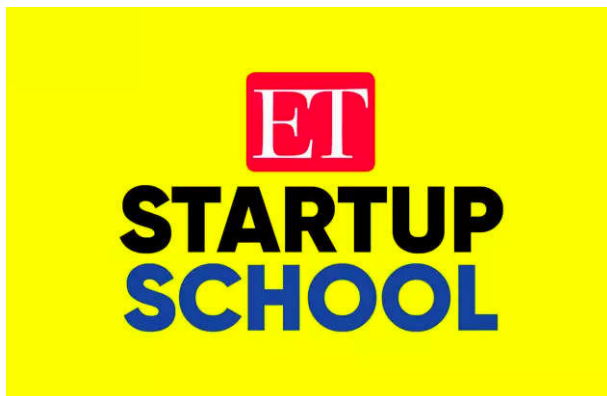
Applications of Podcasting: Business Education via ET Play

The Economic Times (ET) Play is the audio destination for readers of The Economic Times. Conversations on ET Play range from everything entrepreneurship to business sports, and financial markets to specials on vaccination, sustainability, and ethics and law. One of their notable flagship podcast series is the ET Startup School. On these podcasts, journalists from The Economic Times engage in thought-provoking conversations with leading business leaders to understand key happenings in India and the world over. The ET Startup School can be used as a strong medium to inculcate entrepreneurship education amongst students, wherein they can listen in to perspectives from industry experts and educators can then facilitate conversations around key themes/ concepts that emerged from these podcasts (FIG-1).

Applications of Podcasting: Personal Branding

Creating a personal brand requires extensive self-reflection and introspection. It helps to know oneself – which surprisingly very few people do. Most people

Fig-1: Advertisement of ET Startup School



find it extremely difficult to describe themselves, although they often find it easier to explain how they want to be.

If one's ultimate aim for personal branding is to improve the performance of one's business, you first need to ensure that you know who your target customers are. One wants personal branding to match the targeted clientele. A few techniques to Build a Personal Brand include Business Cards, Logo and Graphics, Website/Blogs, Guest Blogging, Social Media, and Podcasting.

Podcasting is a powerful tool for personal branding allowing individuals to share their expertise and experiences with a wide audience and establish themselves as experts in their field. We can use podcasting to build a personal brand by defining our brand and target audience, choosing a unique topic or angle, using storytelling to engage and connect with our audience, using high-quality equipment and production values, or promoting our podcast through social media and other channels.

Figure—2 Personal Branding



Podcasting Industry: Flourishing or Declining?

India emerged as the third largest market for podcast consumption globally in 2020, as per a report by RedSeer. However, only 12% of the Indian population has been exposed to podcasts. This makes India a crucial player in the future growth of the podcasting industry.

The podcasting industry in India grew rapidly between 2020 and 2021, with a 57% increase in monthly active users. The listener base in India has grown from just about four million in 2016 to an estimated 90 million in 2022. The most common

genres famous amongst podcast listeners are comedy, business, finance, news, and current affairs.

There are several factors that have contributed to the growth and popularity of podcasts. One of these is the widespread access to the internet, which has made it easier for people to access and stream audio content from anywhere in the world. Another factor is the rise of work-from-home culture, which has given people more time and flexibility to consume audio content, such as podcasts.

Additionally, there has been a significant improvement in the quality of podcasts, with many creators investing in better equipment and production techniques. The easier access to creation tools has also played a role in the growth of podcasts, as it has made it easier for people to produce and publish their own shows. Finally, there has been an increase in the availability of regional content, which has allowed for a wider range of topics and perspectives to be explored in the podcast medium.

But when it comes to the growth of podcasting we see divergent views between India and the West. In India, there is still 78% of the population has never heard of a podcast and would thus be a part of the yet untapped audience for the podcasting industry. This implies there are likely to be more downloads of streaming apps providing access to podcasts, more listenership, and ultimately more ad revenue for marketers to earn.

However, if one looks at the West, after a period of rapid expansion and a surge in popularity during the pandemic, the podcasting industry is currently grappling with an identity crisis as it enters a phase of maturity. The industry's ecosystem is contracting, and there has been a slowdown in advertising, which

has caused some uncertainty within the medium. There has been a decline in the number of individuals creating new podcast shows, and networks are facing challenges in recouping their investments. Moreover, longtime podcasters are actively seeking out ways to sustain their shows amidst these challenges.

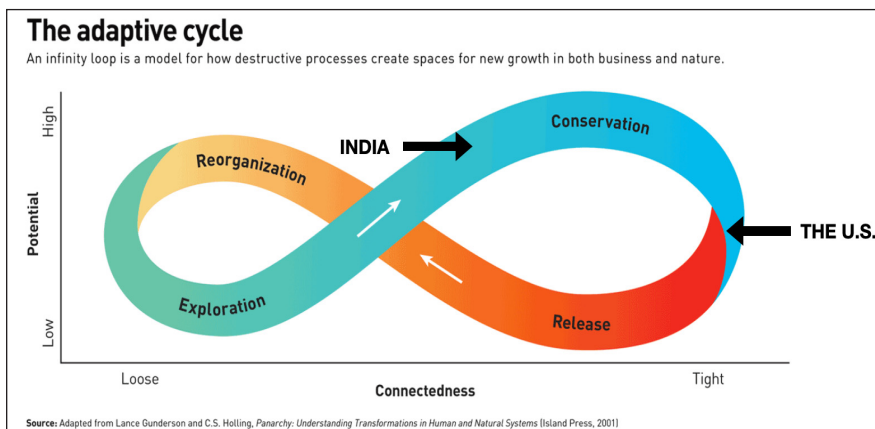
If we apply the concept of the Adaptive Cycle to the growth of the podcast industry, given the immense potential that still exists in India due to its large untapped market, we plot India on the front loop - i.e. the path from Exploration to Conservation. Podcasting is still in its growth stage and has not yet matured in its entirety. However, if we were to plot the U.S., we would plot it on the back loop - i.e. emerging from the conservation stage into the release stage - where players in the industry will take learnings from their previous experiences and build something different to prevent complete wipe off i.e. death of the service.

Creating Effective and Impactful Podcasts

In order to stand out amongst the crowd and create an impactful personal brand, here is a list of eight points to keep in mind:

1. Identify the target audience and what they are looking for.
2. Storytelling is one of the powerful and essential skills to capture attention and engage with the audience. It creates neurological responses that help the listeners focus and empathize with the storyteller.
3. Build a central theme around podcasts either at the beginning of the podcasting journey or at the beginning of every season of the podcast.
4. Be passionate and consistent about the theme identified so that the audience gets a sense of your enthusiasm.
5. Break down the podcast into segments to avoid stumbling and stammering during the episode.
6. Be specific and crisp with the thoughts to be communicated and limit the time to 20 minutes on average.
7. Share notes that direct the audience to the people, products, or sites mentioned during the podcast. This can help when the audience wants to deep dive into a particular topic. Putting

Fig-3: Adaptive Cycle for Growth of Podcast Industry



together some sort of a 'media kit' would be a helpful by-product of the podcast.

8. Be authentic and let your personality radiate through the thoughts you share in the podcast.

Transforming podcasting using Artificial Intelligence

With the help of Artificial Intelligence (AI), podcasting has become even more sophisticated and efficient. From content creation to postproduction, AI plays a vital role in podcasting and has become an increasingly popular medium for distributing and consuming audio content.

One of the most significant ways that AI is being used in podcasting is through the creation of automated transcription services. With the help of AI, podcasters can now generate accurate transcripts of their audio content in real-time. Automated transcription services use natural language processing (NLP) to convert spoken words into text, making it easier for podcasters to edit, review, and share content.

AI in podcasting assists in content creation. While AI-generated content may not be as compelling as content produced by human beings, AI can be helpful for podcasters who need to create short-form content quickly. AI can generate show notes, social media posts, and other ancillary content to help podcasters promote their shows.

AI is also used in post-production to improve podcast audio quality. AI-powered software can remove background noise, equalize sound levels, and improve the overall clarity of audio recordings. This technology can save podcasters significant time and money by reducing the need for manual editing and post-production.

AI can also assist with content creation and recommendation. Through machine learning algorithms, podcast platforms like Spotify and Apple Podcasts can recommend personalized content to their users based on their listening history and preferences. This feature not only improves the user experience but also helps podcasters to reach new audiences.

AI voice synthesis, also known as text-to-speech technology, converts written text into spoken words using AI-powered software. While this technology offers several advantages, such as increased accessibility and efficiency, it poses some dangers such

as misinformation, loss of jobs and authenticity, and concerns related to privacy.

Conclusion

Podcasting is a potentially vast medium through which a brand can reach its target audience. It helps to build loyalty and positive sentiment towards your brand. It helps an individual understand the voice behind the brand, which helps reinforce the brand values and the reasons for its existence. Many times entrepreneurs use this as a platform to build awareness around their unique service offerings as podcasting offers the leverage to reach a comparatively larger audience with a relatively lesser investment. As discussed above, podcasting can also be used as an effective medium to impart higher education, thereby inculcating new pedagogies in the teaching curriculum. This shall help make learning fun and interesting and help digitize education to newer heights.

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10. 13 Tips To Create Engaging Podcast Content



Teachings : Practical and Real

Droupadi Murmu, Hon'ble President of India delivered the Convocation Address at the Convocation Ceremony of Visva-Bharati, Santiniketan on March 28, 2023. She said, "There is a message for everyone, especially the young students, in this. Pioneers like Gurudev choose difficulties over comfort to achieve larger objectives. The young students of Visva Bharati have to focus on this learning from Gurudev's life that one has to come out of one's comfort zone to be able to make a difference." Excerpts

I convey my heartiest congratulations to all the students who have received their degrees today. I also congratulate all the teachers, parents, guardians and the staff members who have contributed to their education and are happy to see the students reach a major milestone in their life.

As the President of India, I happen to be the Visitor of most of the institutions of higher learning under the Government of India. But I feel that it is a special privilege to be the Paridarshak or Visitor of this University established by one of the greatest personalities the world has ever seen – Gurudev Rabindranath Tagore. I am very happy to be with all of you in this historic 'Aamra-kunja'.

Yesterday, I had the privilege of visiting Thakur-Bari at Jora-sanko and offering floral tributes to Gurudev. I will cherish that visit to Gurudev's house as a pilgrimage.

Gurudev left the comfort of the most important city of the Eastern hemisphere in the early 20th century and came to this place which was a remote area those days. There is a message for everyone, especially the young students, in this. Pioneers like Gurudev choose difficulties over comfort to achieve larger objectives. The young students of VisvaBharati have to focus on this learning from Gurudev's life that one has to come out of one's comfort zone to be able to make a difference.

As we all know that besides our national anthem 'Jana-gana- mana', the national anthem of Bangladesh, 'Aamaar shonaar Bangla' is also written by Gurudev. It is so appropriate that 'Bangladesh Bhavan' was established in Visva-Bharati after the birth of that great nation, nearly 30 years after Gurudev had left for his heavenly abode. Gurudev had also composed the university-song of Visva-Bharati. The song, called 'Ashram Sangeet' begins with the beautiful line:

“आमादेर शान्तिनिकेतन

आमादेर शोब होते आपोन”

It is our Santiniketan.

For us, everyone is our very own.

This ideal of universal love is the message of the *Ashram Sangeet*. The song, reflecting the search for unity in humanity, conveys the cosmopolitan spirit which Gurudev called 'Visva-Bodh'.

Dear students, In view of Gurudev's stature and influence, it can be said that the founder of Visva-Bharati was a globally respected sage who combined the best of ancient Indian ethos with the modern streams of rationalism and humanism. You, the students of Visva-Bharati have to spread the eternal messages given by Gurudev.

Gurudev saw India as the leading source of knowledge for the world. He had described this pioneering role of India in 'Geet-Vitaan' in the following words:

“प्रथम प्रभात उदय तव गगने

प्रथम साम_रव तव तपोवने

प्रथम प्रचारित तव वन_भवने

ज्ञान धर्म कतो काव्य_काहिनी ”

Which means:

'Your horizon had seen the first dawn,

Your hermitage had echoed the first chant.

Your exotic abode had been the first paradise -

Spreading the fragrance of knowledge as poem and song'

Ladies and gentlemen, Gurudev's belief that nature is the best teacher is reflected in the way this institution has been designed. There cannot be an

ambience more conducive to holistic learning than what we see here. He wanted to liberate the process of education from the confines of conventional systems borrowed from the West. He was against the rigid structures and methods in which students were passive receivers and not active partners in learning. He also felt the lack of sensitivity ingrained into the system. Through Visva-Bharati, he has given us the gift of a learning system which is close to nature, which blends jnana and vijñana - that is - spirituality and modern science, ethics and excellence, tradition and modernity. For Gurudev, learning was boundaryless and boundless.

In many ways, the National Education Policy, 2020 re-affirms the convictions of Gurudev. We all know that when he realised that there was a lack of books in Bangla on certain subjects, he wrote new books in Bangla on those subjects. The importance of nature and mothertongue was central to his idea of education.

Dear students, Gurudev wanted education to promote creativity and individuality and not produce stereotypes and careerists. I am happy to note that VisvaBharati has adhered to Gurudev's philosophy of education and produced many celebrated artists and creative individuals. Credit for maintaining this rich tradition goes to generations of teachers and students.

However, in order to measure up to the expectations of Gurudev from Visva-Bharati, everyone in the University should remember what he had said in the first meeting of its Executive Council. Gurudev had said and I refer to him: 'Though this Visva-Bharati is India's own, it must become the site of the entire world's endeavour' to not only disseminate but generate knowledge. Thus, Gurudev wanted Visva-Bharati to become a global knowledge-hub. It is the

duty of everyone associated with VisvaBharati to keep in mind Gurudev's vision and wishes.

Gurudev took pride in the Indian knowledge tradition. In our tradition, it is said – 'Only that learning is meaningful which liberates:

सा विद्या या विमुक्तये

Liberation from ignorance, narrow-mindedness, prejudice, negativity, greed and other such limitations is the real objective of education. I am sure that students of Visva-Bharati will help build better communities wherever they choose to live and work.

Ladies and gentlemen, As we all know, Gurudev made immense personal sacrifices to build and sustain this great abode of learning. He sold his ancestral property at Puri in Odisha. His wife sold her ornaments. Later, he used the money he received as part of the Nobel Prize for the educational institutions here. He set an example of great personal sacrifice for a noble collective cause. I believe that the joy of giving is the greatest joy, and Gurudev's generosity is one of its finest examples. Students and teachers of the Visva-Bharati community owe it to Gurudev to follow his spirit of giving.

I once again congratulate all the students for their accomplishments. I am sure that the Visva-Bharati family will continue to move ahead with the grand vision of universal well-being. I wish the students, teachers and everyone associated with the university, a very happy and fulfilling future ahead. In the end, I bow in reverence to Gurudev Rabindranath Tagore.

Thank you! Jay Hind!
Jay Bharat!

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CAMPUS NEWS

National Conference on Biotechnology for Sustainable Development and Human Welfare

A two-day National Conference on 'Biotechnology for Sustainable Development and Human Welfare' was organized by the Department of Biotechnology, Jamia Hamdard, New Delhi in collaboration with the Department of Biotechnology and the Department of Science and Technology, Ministry of Science and Technology, Government of India, recently. The event was sponsored by DBT and DST (SERB), Government of India. The Chief Guest, Prof. Asim Ali Khan, Director General of CCRUM, Ministry of AYUSH, Govt. of India graced the event with his presence and enlightened the participants about the need for interdisciplinary research and collaboration between industry and academia as well as research institutions. The presidential address was delivered by Prof. M Afshar Alam, Vice Chancellor, Jamia Hamdard in which he said that hunger, poverty, and climatic changes are big challenges that the world is facing, for which a coordinated and dedicated research-based approach and implementation are required. Prof. M Z Abdin, Organizing Secretary of the event informed that the Department of Biotechnology, Jamia Hamdard is engaged in various biotechnological research projects and has been granted patents.

More than 250 scientists, delegates, and researchers working in the field of biotechnology, agriculture, and sustainable development presented their research papers and views on cutting-edge technologies and ongoing research in the field of biotechnology to achieve the United Nation's Sustainable Development Goals. There were eleven plenary talks and twenty-five invited talks on a variety of important topics related to sustainable development which contributed to addressing the global challenges we are facing and what measures we can take to solve the hurdles.

The oral presentations by seventeen researchers and poster presentations by more than sixty Ph.D. students illuminated their important and advanced research works carried out in their laboratories from different backgrounds throughout India and communicated/ published in peer-reviewed journals.

Prof. Deepak Pental, in his keynote address, talked about the past and future of agriculture. He mentioned that the major developments in the 20th century helped to beat the scarcity of food but as the global population is continuously increasing and under-nutrition is still rampant in many parts of the world. His focus was on the positive role of genetically modified crops to fulfill global food needs.

Dr. Sudhanshu Vrati shared his work on the development of the Indian rotavirus vaccine. As part of the Indo-US vaccine action programme, his team established the safety and efficacy of the 116E rotavirus vaccine 'Rotavac' and launched it for commercial use. The vaccine has since been prequalified by the WHO.

Prof. S P S Khanuja described the importance of organic farming in order to cultivate health and nutrition in farmers' fields. He concentrated on strategic agriculture which opens the possibilities for farmers to enter into ventures of novel nutraceutical products that today the world is crazy about, for preventive healthcare. This approach of enabling farmers with the scope of nutraceuticals farming offers high-value agriculture and better incomes.

Dr. Ajit Kumar Shasany and Dr. Viswanathan Chinnusamy highlighted the importance of genetic modifications in crops to get the desired traits for sustainable crop production. They were inclined to develop crops by genome editing technique (CRISPR/Cas9) falling under SDN1 and SDN2 because of exemption from stringent GM rules. Such crops can be released for commercial cultivation for the benefit of farmers and consumers.

Dr. A K Panda introduced the concept of cellular engineering for the frontline of medical biotechnology. He discussed the applications of tissue engineering, gene therapy, and cell therapy particularly immunotherapy of cancer.

Dr. Vibha Ahuja elaborated on the series of guidelines that have been issued from time to time by regulatory authorities to provide scientific guidance for R and D and biosafety evaluation of products of modern biotechnology.

Dr. Sanjay Kumar talked about the development of a Bio-based economy using Himalayan bioresources. He mentioned that there is enough opportunity to utilize Himalayan bioresources for socio and economic development through biological interventions and at the same time, conservation and propagation of these resources is also essential. Dr. Aseem Bhatnagar marked out the relevance of incubation centers to high-end research labs and highlighted the uniqueness of the Jamia Hamdard incubation center.

Dr. M K Reddy discussed the improved agronomic performance in rice crops. His team successfully improved the architecture of rice plants by increasing the tiller number, grain length, panicle branching, and spikelet number to enhance the rice yield using the Cas9 system. Dr. Niranjana Chakraborty described the mechanism of action of stress-responsive genes in chickpeas.

The dignitaries who graced the occasion were Deans, heads of Departments, faculties, scientists, and officers. The students of bachelor, master, and research scholars from Jamia Hamdard and various other universities/ institutions across India were also present. The valedictory session happened after the prize distribution to winners from oral and poster presentations. The vote of thanks was proposed by Dr. Javaid Ahmad Sheikh, Convener of the event. The programme ended with the 'National Anthem'.

Workshop on Realizing Key-enablers to Achieve 21st Century Vision in Academies

A five-day Workshop on 'Realizing Key-enablers to Achieve the 21st Century Vision in Academies: In the Context of Indian Technical Institutions' is being organized by the Department of Mechanical Engineering, National Institute of Technology, Rourkela, Odisha during July 08-12, 2023 through Virtual Mode. The objective of the workshop is to create awareness of the entire philosophies and aspects of the implementation of the National Education Policy-2020 (NEP-2020) in the context of technical institutions throughout the nation. NEP-2020 considers the active participation of various stakeholders (students, teachers, parents, and industries) which aims to create an outcome-based education process satisfying current market needs and thus enabling graduates to face the highly competitive Global world. NEP-2020 focuses on

transforming India sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, thereby making India a global knowledge superpower. The major themes of the event are:

- **National Education Policy- 2020**
- **Accreditation**
- **Ranking of Technical Institutions**

For further details, contact Coordinator, Dr. Kaustav Chaudhury, Assistant Professor, Department of Mechanical Engineering (New Mechanical Science Building), National Institute of Technology Rourkela, Odisha-769008, Phone No: +91 661 246 2535 (Office), Mobile No:08530897399, E-mail: chauduryk@nitrkl.ac.in. For updates, log on to: www.nitrkl.ac.in.

International Conference on 'Advances in Minerals, Metals, Materials, Manufacturing and Modelling-2023

A two-day International Conference on 'Advances in Minerals, Metals, Materials, Manufacturing and Modelling-2023' is being organized by the Department of Metallurgical and Materials Engineering, National Institute of Technology Warangal, Telangana State in association with IIM Hyderabad Chapter during September 22-23, 2023. The purpose of the conference is to provide a platform for academicians, scholars, researchers, and industry personnel from all around the globe to discuss and disseminate the knowledge created in minerals processing, materials development, materials degradation, and computational materials modeling. The event is structured around several thematically focused sessions during which participants present their work and discuss the advances and challenges in these thematic areas. The Topics of the event are:

- Advances in mineral processing;
- Advances in iron and steel making;
- Special steels and alloys;
- High-temperature materials;
- Nanomaterials and nanostructured materials;
- Corrosion and oxidation;
- Creep, fatigue, and creep-fatigue interaction;
- Surface engineering;
- Powder metallurgy;
- Advances in manufacturing;

- Advances in aerospace materials;
- Thermomechanical processing;
- Welding/Joining;
- Advanced ceramics/Composites/Polymers;
- Additive manufacturing;
- Light alloys/Energy materials/Bio-materials; and
- Computational materials science/Process modeling.

For further details, contact Convener, Metallurgical and Materials Engineering Department, National Institute of Technology, Warangal- 506 004, Telangana State, Mobile: +91 8106933877, +91 9866310178 E-mail: icam5@nitw.ac.in. For updates, log on to: <http://cms.nitw.ac.in/conference/icam2023/>

AIU News

Faculty Development Programme on ICT for Office Use

A nine-day Online Faculty Development Programme on 'ICT for Office Use' was organised by the Association of Indian Universities (AIU), New Delhi, and Academic and Administrative Development Center (AADC), Atal Bihari Vajpayee Vishwavidyalaya (ABVV), Bilaspur during December 16-24, 2022. Around twenty-six participants from affiliated colleges of the University participated in the event.

Dr. Pankaj Mittal, Secretary General, Association of Indian Universities was the Chief Guest of the Inaugural Function who joined online. The workshop was presided over by the Vice Chancellor, Prof. A D N Bajpai. The Head of the Computer Science and Application Department, Dr. H S Hota and the Registrar of the university were also present during the inaugural function.

Dr. H S Hota explained the theme and contents of the event. While delivering the welcome address, Dr. Hota highlighted the role and purpose of the event, welcomed all the attendees, and said that the event will be helpful in providing practical knowledge of technology so that the college staff associated with the administrative staff will be able to do all the work of the college through technology.

Dr Pankaj Mittal highlighted the objectives for setting up an Academic and Administrative Development Center (AADC) by the Association of Indian Universities. She gave a brief introduction and let the audience know that the Academic and Administrative Development Center is a pioneering initiative of AIU and ABVV, Bilaspur directed towards training and capacity building of faculty

members and administrative functionaries of universities for dealing with hybrid/blended learning with a focus on latest pedagogical reforms. It will offer short-term programmes aimed at continuous capacity building of the key stakeholders through online and in-person modes. She also said that the center will play a leading role in providing information and training to teachers, administrative officers, staff, students, and research scholars on the use of technology in teaching and research, and practical practice.

Prof A D N Bajpai, in his address, said that dissemination of Information Communication Technology (ICT) through this center will help to spread the awareness of technology among the students, teachers, research scholars, and administrative staff. He also extended his thanks to the Secretary General of the Association of Indian Universities for marking Atal Bihari Vajpayee Vishwavidyalaya (ABVV) for this event.

Ms Prerna Verma explained Google Forms and Google Docs. She explained using Google Forms, users can create and analyze surveys right in their mobile or web browser—no special software is required. She also explained how Google form customization should take place. Hands-on practice on creating Google Forms and its options like creating quizzes, changing themes, enabling photo and document uploading options, etc. were discussed and implemented. Later on, accessing the response sheet in CSV format, excel format and making its offline copies were discussed.

Mr Vivek Tiwari explained the practical use of MS Excel. He gave information about file creation, cell formation, various basic formulas like sum, max, count, and average, and advanced formulas

and functions like Index match, If-Then, Choose, Concatnet, etc. in MS Excel. He gave practical knowledge about various types of charts, hyperlinks, object insertion, work with data tools, lookups, references, etc.

Ms Gajala Mumtaz Mollick explained the process of website development and maintenance at the front-end using HTML and CSS and various website development tools. She also shared some important information about computer hardware such as RAM, SMPS, Motherboard, CMOS, etc. Further, she explained the problems faced by the computer and how to fix them and provide information related to MS Office and shortcut keys and how to create shortcut buttons to increase typing speed in the computer.

Dr. Richa Handa shared important practical knowledge about MS Word. In her lecture, she explained the basic functions of the word processor such as file creation, file formatting, text formatting, word style, page layout, page setup, page background, etc. She also demonstrated practical implementation by taking a real-life example to develop word documentation for a university. She further explained how the insertion of tables, formulas, and illustrations such as pictures, clip art, charts, hyperlinks, bookmarks, header footers, etc. in the file or document will take place with all these important topics like mail merge, document printing, document protection, and linked notes were also covered. Mail merge is an important tool used to send mass emails. Document printing and its different printing option should be known to the user. All these topics were cleared in her lecture in a demonstrative manner.

Mr Tiwari began the programme by introducing the concept of graphical analysis and its importance in conveying information effectively. He provided an overview of the various types of graphs and charts available in MS Excel, highlighting their specific applications and when to use them. He gave a demonstration for plotting graphs and fitting data, visualizing data with charts, creating combination charts, simple linear plots, etc. in Excel. He also gave information about online graphical analysis tools using which person can create their charts more interactively. He also explained the poster design. He further explained how to install fonts, software installation and uninstallation, antivirus installation, and updation, create a USB bootable drive of Windows 7 & 10, fixation of memory card with the

help of DOS commands to repair it, online word (Unicode to Kritidev), etc. Through his expertise and engaging teaching style, participants gained a deeper understanding of data visualization techniques and the power of graphical analysis in conveying information effectively.

Mr Negi began the programme by introducing Microsoft PowerPoint as a powerful tool for creating visually appealing presentations. He explained the various elements of the PowerPoint interface, including the ribbon, slides, and slide layouts, enabling participants to navigate the software effectively. He explained presentation creation, slide animation, transition, insertion of variable pictures, audio, video, charts, etc., and its important features in PowerPoint and explained how to implement it. Along with it doubt session using a practical was implemented by the audience in their systems. He also elaborated on developing animations and slide transition periods, audio and video mergers. He also provided participants with valuable insights and practical guidance on creating engaging and impactful presentations. Through his expertise and interactive teaching style, participants gained a deeper understanding of the software's features and learn techniques to design visually appealing slides.

Mr Gajendra Choure gave information about the internet and cyber security. He explained basic security features, provided by MS Windows OS, browser security, cookies, cache, etc. He also explained the blocking of unwanted sites. He highlighted the rapid growth of the internet and its increasing impact on all aspects of our lives, from personal communication to national security. The interconnected nature of cyberspace necessitates a proactive approach to safeguarding data, infrastructure, and individuals from cyber threats. He provided a comprehensive overview of the current cyber threat landscape. He discussed various types of cyber-attacks, including phishing, malware, ransomware, social engineering, and distributed denial-of-service (DDoS) attacks. Mr. Choure stressed the importance of understanding these threats to mitigate risks effectively. During the presentation, Mr. Choure shared several best practices for maintaining internet security.

The programme concluded with the distribution of certificates after the practical and theoretical examinations. Various centers have been established in India by the Association of Indian Universities for

the use of Information Communication Technology for academic and administrative purposes, but Atal Bihari Vajpayee University is the first center established in Chhattisgarh. The valedictory session was chaired by Prof. A D N Bajpai, Registrar of the University, Head of the Department, Dr. H S Hota and other faculty members of the department. Prof. Bajpai inspired the participants and participants expressed their gratitude for having an opportunity to be a part of the event and also shared their experiences. Finally, Registrar, Mr. Shailendra Dubey proposed the Vote of Thanks.

Faculty Development Programme on Integrating Technology

A five-day Faculty Development Programme on 'Integrating Technology in Higher Education: Opportunities and Challenges' was organised by the Association of Indian Universities (AIU), New Delhi in collaboration with the Academic and Administrative Development Centre (AADC), Amity College of Nursing (ACN) and Amity Academic Staff College, Amity University Haryana (AUH) from March 20-24, 2023 through virtual mode. About sixty-two faculty members registered for the programme from various parts of the country.

Vice Chancellor, Prof P B Sharma, in his address, highlighted how a teacher cannot be ignorant of the use of technology. He brought out the significance of awareness and training of all the educators in this regard and appreciated that the programme is the right step in this direction. He enlightened the participants regarding the power of technology in enhancing knowledge, enabling teachers to teach from labs, classrooms, online, and the ways in which integration of technology in university has changed the spectrum of teaching and learning.

Prof Vikas Madhukar, Pro Vice Chancellor, Amity University in his address, stressed the significance of technology. He highlighted how Amity University ensures the usage of technology while ensuring an adequate personal touch. The use of technology can bridge the gaps between theory and practice. He also shared how technology has changed the face of teaching in the modern era. He further expressed the idea of a Prep-AI that can automatically generate questions on any topic from various resources.

Dr Sanjana Vij delivered her opening remarks in which she presented an overview of how technology

holds significance in education. She also highlighted that educators must remember that technology can never replace the importance of face-to-face interactions and the personal touch that comes with it. Therefore, we must ensure that we strike the right balance between using technology and face-to-face teaching methods.

The welcome address was delivered by Dr. Sunita Srivastava, wherein she focused on how technology is entering all spheres of life and it is high time for a teacher to be updated about the same. She also expressed that experts in the field of education have been invited to add value to the sessions and the participants are going to have productive learning. It was followed by a brief address by Dr. Amarendra Pani, Head, Research Division, AIU. He emphasized changing teaching methods by using technology thereby making learning more accessible to all. He also said that it is time that all of us are abreast of technological advancement and be prepared to face any situation.

Dr. Pankaj Mittal shared her insights regarding innovative teaching methods playing a crucial role in education, enhancing the maximum engagement of students. Also enhancing the usage of technology in teaching increases creativity among students. She emphasized maintaining an optimum balance in the use of technology while maintaining a personal touch in education. She praised the conveners for their initiative to train faculty on the usage of technology.

Prof. Sridhar Srivastava shared his thoughts on enhancing the use of technology in teaching giving opportunities for students for learning on digital platforms, and strengthening the potential enhancement of the Nursing profession and students. He also stated how technology is enhancing peer learning and is used for assessment purposes.

The Chief Guest, Prof. V N Rajasekharan Pillai, Vice Chancellor, Somaiya Vidhya Vihar University expressed that technology will be an asset, but it is not technology but a teacher who teaches. He focused on using advanced technology methods in teaching so that it will enhance retention among students, improve learning outcomes, and promote critical thinking skills.

The inaugural session concluded with a vote of thanks by Dr. Sunita Srivastava, Principal, Amity

College of Nursing, AUH who shared that it was quite a thought-provoking and enriching session as they could listen to the first-hand experiences of the leading educators in India.

The next session was on 'Integrating Technology in Higher Education: Opportunities and Challenges' through virtual mode. Dr. Sunita Srivastava welcomed all the participants and session speakers to the session. She also motivated the participants present in the session to share their valuable feedback on the previous day's session.

Prof. G Janardhanan, Department of Civil and Environmental Engineering, NITTTR, Chennai started the session on the topic 'Blended Approach in Teaching: Is It Doing Things Better or Doing Better Things'. He shared that learning assistance, learning environment, and learning material play an important role in blended learning. The course content and learning outcome are the fixed areas, only usage of effective designs can lead to good learning outcomes. He shared that teaching in the 21st now century needed a flipped model of teaching, where teachers introduced new material outside the classroom as their homework, and students and teachers work together during classroom hours on levels of learning. He enlightens the participants by the actual meaning of blended learning is the thoughtful fusion of face-to-face and online learning experiences. He shared his thoughts on the selection and design of the digital ecosystem by sharing knowledge regarding various factors. He shared various open educational resources, and learning assessment websites and made the session very much interactive by involving the participants to do various activities online.

Dr. Hariprasath Pandurangan, AP, Amity College of Nursing, AUH shared his wisdom on the topic, 'Simulation in Teaching'. He introduced the topic by sharing his thoughts on that simulation in education is a specially designed animated model that looks like a live environment in which learners can experience different real-life situations. Simulation in teaching is an effort to improve the alignment of coursework and field experiences. He also shared about the various methods to implement simulation in Higher education to make teaching and learning more effective and increase the retention time of learning. There are various simulation tools that are available online and can use by the teachers and students to make their learning experience more livelily and knowledgeable, giving them real-life scenario experience.

The session on 'Integrating Technology in Higher Education: Opportunities and Challenges' started through virtual mode. The speakers were Ms Aastha Dhingra, Department of Psychology, SGT University, and Ms Deepti Sharma, Clinical Project Manager at Cancer Trials, Royal College of Surgeons, Ireland. Dr. Sunita Srivastava welcomed all the participants and session speakers. She also encouraged the participants present in the session to share their valuable feedback on the previous day's session.

Ms Aastha Dhingra, Department of Psychology, SGT University shared her thoughts on 'Gamification in Teaching'. She shared that in gamification, there is a higher use of game mechanics. Game mechanics are the rules and processes that govern a game. They include elements such as points, levels, rewards, and leaderboards. In gamification, these machines are used to create an engaging and motivating environment for learning. They can be used to incentivize students to complete tasks or reach certain goals. There are several benefits of including gamification in teaching like increasing student engagement and motivation, making learning fun and interactive, and improving knowledge absorption and retention.

Ms. Deepti Sharma, Clinical Project Manager at Cancer Trials, Royal College of Surgeons, Ireland shared her insight on 'Trends in Usage of Technology in Teaching'. She shared her thoughts on including the modern concept and trends of technology in teaching. She also focused on promoting the self-study concept for students and students prefer a learning environment in a blended way. She enlightened the participants to follow the current trends in teaching and also shared her thoughts on selective teaching implemented by the teachers in teaching.

The session on 'Integrating Technology in Higher Education: Opportunities and Challenges' started through virtual mode. The speakers were Dr. P Malliga, Department of Computer Science and Engineering, NITTR, Chennai, and Prof. Anuj Desh Pande, Maratha Mandal Engineering College, Belagavi, Karnataka. Dr. Sunita Srivastava welcomed all the participants and session speakers.

Dr. P Malliga, Department of Computer Science and Engineering, NITTR, Chennai shared her views on 'Immersive Technology Extended Reality (AR, VR & MR) in Education'. She started

her topic by giving a brief knowledge about the top disruptive education technologies like online learning, chat-based collaboration, AI-Guided learning, and virtual and augmented learning. The oncoming generation of Z learners possesses some characteristics like, multimodal learners, good at discovering information, relaxed and flexible learning environment, multitasking, extremely rational, peer learning and prefer active and experimental learning. As enhancing these characteristics in learners there are various forms of E-content available including Immersive content i.e., virtual reality and augmented reality. There are various industries that are using virtual reality and augmented reality e.g., education, healthcare, air and space, travel, automotive, skilled trade, journalism, retail, and marketing. With the help of immersive technology in education we are bringing the science concept to life and making it easy for students to learn it more effectively and increasing their interest and attention. She concluded the topic by sharing her thoughts that with this immersive technology, we are creating a stimulating and creative environment for our learners.

Prof. Anuj Desh Pande, Maratha Mandal Engineering College, Belagavi, Karnataka shared on 'Virtual Reality and Augmented Reality'. He started his presentation with the basic definition of AR and VR. He also shared the criterion differentiation between augmented reality and virtual reality. Both AR and VR give interactive learning experiences, facilitate experimental learning, create a safe and controlled learning environment, and also enable students to learn at their own pace. Each teacher should follow some best practices for integrating AR and VR in teaching like aligning the technology with the learning objectives, providing appropriate training for instructors and students, ensuring accessibility, and considering ethical and privacy implications. With the current scenario of using AR & VR in education, the coming future includes technologies and trends, opportunities, and challenges. He shared a few tips at the end of the session regarding how to get started with AR & VR in teaching and learning by starting the use on a small scale, collaborating with others, and focusing on the learning experience.

The last session on 'Integrating Technology in Higher Education: Opportunities and Challenges' started through virtual mode. The speakers were Prof. D G Kulkarni, Principal, Maratha Mandal

Engineering College, Belagavi, Karnataka, Prof. Anuj Desh Pande, Maratha Mandal Engineering College, Belagavi, Karnataka and Dr. Udaya Narayana, Dean, Faculty of Arts and Humanities, Amity University Haryana. Dr. Sunita Srivastava welcomed all the participants and session speakers.

Prof. Anuj Desh Pande started the last day session with an introduction about the types of learning including behaviourism, cognitive, constructive, humanism, and connectivism. He discussed about E-learning means any stored content accessed anytime, anywhere on any device. He also discussed blended learning and hybrid learning. He also enlightens about the Gen Extra Muros (GEM) pedagogy which is a mapping of physical classes to digital classes, empowering educators and connected learners.

During Valedictory Session, Dr. Sunita Srivastava presented an overview of the event. She summarized the sessions of each day by giving a brief insight into each session topic. She showed gratitude towards all the resource persons to grace the event with their valuable presence and shared their wisdom on this changing and evolving area in teaching and how it will impact teaching and learning. She thanked organisers and faculty members of AUH who have shown active participation throughout the event to make it a huge success.

Dr. Udaya Narayana shared his thoughts on how knowledge is expanding very fast via the usage of technology. AI technology power taking over teaching and learning but still, we are not fully using its potential in the learning aspect. He also shared the examples like NCERT changing the curriculum as technology gets involved in teaching in learning. He focused on the aim of technology in adding teaching and learning to bring the interaction, creating the content properly, before implementing them in teaching and learning testing them and finding out what does work best, and then rebuilding again if need any changes.

Ms Arti, AP-II, Amity College of Nursing, AUH proposed the Vote of Thanks to all the dignitaries, session speakers, programme Coordinators, and participants to show their enthusiasm to come on this virtual platform from all over the world together and share their thoughts.

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THESES OF THE MONTH

HUMANITIES

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

Geography

1. Bajpai, Vanya. **Glacier inventory and Hazard Zonation of Moraine Dammed Lakes in Eastern Himalayan Region.** (Prof. ROlee Kanchan), Department of Geography, M S University of Baroda, Vadodara.

2. Sourav Kumar. **Patterns and implications of out-migration in Garhwal Himalaya and Chotanagpur Plateau: A comparative study.** (Prof. V P Sati), Department of Geography and Resource Management, Mizoram University, Aizawl.

History

1. Bhutia, Karma Samten. **Socio-economic and political status of the Bhutias in Sikkim since 1975: Change and continuity.** (Prof. K Datta), Department of History, University of North Bengal, Darjeeling.

2. Minakshee Kumari. **From obscurity to a metropolitan: A history of the growth and expansion of Siliguri Town with particular reference to its geostrategic importance (Circa 1835-2014).** (Prof. K Datta), Department of History, University of North Bengal, Darjeeling.

Languages & Literature

Assamese

1. Kalita, JohnKumar. **RameshPathakarbhasacharcha-Eti bishlesanatmak adhyayan: Language study by Ramesh Pathak-An analytical approach.** (Dr. Champakali Talukdar), Department of Assamese, Cotton University, Guwahati.

English

1. Lalduhawmi, Lydia. **Conflict and Trauma in transition: The young adult experience from select texts.** (Prof. Lalrindiki T Fanai), Department of English and Culture Studies, Saurashtra University, Rajkot.

2. Mehta, Nidhi. **William Faulkner's religious vision: A study of selected works.** (Dr. Rita), Department of English, Kurukshetra University, Kurukshetra.

3. Nair, Ajaykumar Kesavan. **Spaces of conflict in the graphic novels of art spiegelman, Sajad Malik, Marjanestrapi and Joe Sacco.** (Dr. Sunil Ratibhai Sagar), Department of English, Marwadi University, Gujarat.

4. Pateliya, Jashodaben Maganbhai. **English teaching methods, approaches and techniques as a second language in select districts of Gujarat State: Previous trends and future direction.** (Dr. Jinendra Jain), Department of English, Gujarat University, Ahmedabad.

5. Pithadiya, Nitinkumar Vinodrai. **Existentialism in select novels of Arun Joshi, Anita Desai and Shashi Deshpande.** (Dr. Rachit Kalaria), Department of English, Saurashtra University, Rajkot.

6. Sama, Amin Shermamad. **Short stories on the Eastern and Western partition of India: A comparative study.** (Dr. Kamal Mehta), Department of English, Saurashtra University, Rajkot.

7. Sumait, Mohammed Mustafa Ahmed Bin. **Interference of Arabic language on Hadhrami students of English: A phonological study.** (Dr. Meti Mallikarjuna), Department of English, Kuvempu University, Shankaraghatta.

8. Vavaiya, Dharmesh Pravinbhai. **Man's dependence and nature's independence: An ecocritical interpretation of selected fictions.** (Dr. Rachit Kalaria), Department of English, Saurashtra University, Rajkot.

9. Venkateshwara, K. **Brecht's impact on modern Kannada theater: A semiotic analysis.** (Dr. Meti Mallikarjun), Department of English, Kuvempu University, Shankaraghatta.

Hindi

1. Kshatriya, Arteesingh Angadsingh. **Narendra Kohali ke upanyasoan mein mithak.** (Dr. Manish Gohil), Department of Hindi, Gujarat University, Ahmedabad.

2. Baria, Kirankumar Vilsingbhai. **Maitri Pushpa ke sahitye mein 'Yug Bodh'.** (Dr. B K Kalasva), Department of Hindi, Saurashtra University, Rajkot.

3. Makwana, Vijubhai Kantilal. **Main fields of functional Hindi and its technical terminology.** (Dr. Geljibhai Bhatia), Department of Hindi, Gujarat Vidyapith, Ahmedabad.

4. Parmar, Dipa Kanjibhai. **Usha Priyamvada ke kahaniyoan mein istri-purash sambandhoan ke samasya: Ek anusheelan.** (Dr. A V Nandaniya), Department of Hindi, Saurashtra University, Rajkot.

5. Prajapati, Poonamben Kanaiyalal. **Hindi aur Gujarati kahaniyaoan ka tulnatamak adhyayan: Sushila Takbhore, Swati Tiwari aur Himanshi Shelat, Chandra Shrimali ke paripekshy mein.** (Dr. Karsan N Ravat), Department of Hindi, Gujarat University, Ahmedabad.

6. Sondarwa, Alka Ramjibhai. **Ikkiswi sadi ke upanyasoan mein istri purash sambandh.** (Dr. Nisha Rampal), Department of Hindi, Gujarat University, Ahmedabad.

Linguistics

1. Unni, Shini. **Dyslexia: Language teaching methods for dyslexics acquiring English as a second language.**

(Dr. Nilotpala Gandhi), Department of Linguistics, Gujarat University, Ahmedabad.

Marathi

1. Gaikwad, Girish Yashwant. **Dangi Loksahitya ani sanskruti: Ek abhyas.** (Prof. Sanjaykumar Karandikar), Department of Marathi, M S University of Baroda, Vadodara.

Sanskrit

1. Amoli, Sunil. **A critical study of epic Gangaputravadanam written by Niranjana Mishra.** (Prof. Prabhat Kumar Mohapatra), Department of Sahitya, Central Sanskrit University, New Delhi.

2. Bairwa, Kavita. **A critical study and poetic review of Hanumadayana Mahakavya.** (Dr. Chhoti Bhai Meena), Department of Sahitya, Central Sanskrit University, New Delhi.

3. Bhatt, Rajnikant Shankarlal. **The critical study of Aumkar Brahmgitam. of Rsiraj Agnihotri with reference to Isadi Ten Udnisads.** (Dr. R P Mehta), Department of Sanskrit, Saurashtra University, Rajkot.

4. Dangwal, Harischandra. **A critical study of the scientific elements as reflected in Mahabhashya of Patanjali.** (Prof. Banamali Biswal), Department of Vyakarna, Central Sanskrit University, New Delhi.

5. Dayanand, A R. **A critical and analytical edition of Muhurtachudamani written by Shivadaivajna.** (Dr. Ishwar Bhat), Department of Jyotisha, Central Sanskrit University, New Delhi.

6. Deshpande, Ashwini Gangadhar. **Critical study of the Kalavadhakavyam of Krishnalilasuka.** (Prof. E M Rajan), Department of Sahitya, Central Sanskrit University, New Delhi.

7. Dhamecha, Radhika Hasmukhbhai. **Vainayakam Mahakavyam: A critical study.** (Dr. B J Solanki), Department of Sanskrit, Saurashtra University, Rajkot.

8. Gadhavi, Arati Dashrathbhai. **Shrimadbhagwat-purane varnitanam Rishinam Muninam cha charitasey puranantren seh tulnatamakam adhyayanam.** (Dr. Yoginibahen Vyas), Department of Sanskrit, Gujarat University, Ahmedabad.

9. Gajera, Artiben Manukhlal. **A critical study of the Sanskrit inscriptions of Maitraka Vamsa.** (Dr. K U Jadeja), Department of Sanskrit, Saurashtra University, Rajkot.

10. Mishra, Om Narayan. **Importance of yoga darshan information of Shastra justified social thinking in modern context.** (Prof. Sukanta Kumar Senapati), Department of Sarva Darshana, Central Sanskrit University, New Delhi.

11. Mishra, Shalini. **Mahamahopadhyachitradharkritayah shringarsarinyah parishilanam.** (Dr. Ramjee Pandey), Department of Sahitya, Central Sanskrit University, New Delhi.

12. Parmar, Lalita. **Shrimadbhagwat (Dasham Skand) ke aalok mein Shri Gopal Champu evam Anand Vrindavan Champu ka tulnatamak adhyayan.** (Dr. Shitanshu Rath), Department of Sanskrit, Vikram University, Ujjain.

13. Parveen Kumar. **Srimadbhagavadagitayah Dvitiyashatke vaidikatattvanam sadbhavasameekshanam.** (Prof. Manoj Kumar Mishra), Department of Veda, Central Sanskrit University, New Delhi.

14. Prajapati, Sneha Natwarlal. **Mahabharte shanti-parvni nirupitanam jeevanmulyanamnusheelanam.** (Dr. Atulkumar B Unagar), Department of Sanskrit, Gujarat University, Ahmedabad.

15. Saini, Rajender Kumar. **Srimadbhagwatgeetah tatha Kuran itsyasya samanvayatmakamadhyayanam.** (Dr. Ajay Kumar Mishra), Department of Sahitya, Central Sanskrit University, New Delhi.

16. Sharma, Ruchi. **Rasesvara darsana ke siddhanta evam prayoga: Ayurveda, Bauddha, yoga evam saiva tantra ke paripreksya mein.** (Dr. Vibha Aggarwal), Department of Sanskrit, Kurukshetra University, Kurukshetra.

17. Sreelatha, M K. **The story of Udayana in bhasa plays: Early sources and references.** (Dr. E M Rajan), Department of Sahitya, Central Sanskrit University, New Delhi.

18. Sumedha. **Praudhamanoramasthashadlingaparakaranasya Mahabhashyadrishtya sameekshanam.** (Prof. Vishnukant Pandey), Department of Vyakarna, Central Sanskrit University, New Delhi.

19. Suneesh Kumar, T K. **Kadambariyam prakriteh sameekshatmakam adhyayanam.** (Prof. Tirumal P Kulkarni), Department of Sahitya, Central Sanskrit University, New Delhi.

20. Vijaybhai, Oza Samartha. **Nyaysahityevyakaranshas-treshu abhidhdivritanam vimarshh.** (Dr. Mayuriben Bhatia), Department of Sanskrit, Gujarat University, Ahmedabad.

21. Zala, Maheshkumar Nanubhai. **Shrimadbhagwad-geetayah pathanatranaam sameekshatamakam adhyayanam.** (Dr. Kamleshkumar C Chokashi), Department of Sanskrit, Gujarat University, Ahmedabad.

Telugu

1. Narsimulu, Ch. **Namaami jeevitham-udyamam-saahityam-parisheelana.** (Prof. P Kanakaiah and Narsimulu), Department of Telugu Studies, Telangana University, Nizamabad.

Philosophy

1. Abhay Kumar. **Samkaleen Bhartiye pariprekshey mein Gandhi darshan ka samikshanatamak anusheelan.** (Prof. A P Dubey), Department of Philosophy, Dr Harisingh Gour Vishwavidyalaya, Sagar.

2. Gamit, Ajaykumar Dhanjibhai. **Vaidic Varnashar-ma Dharm in Plato's republic.** (Dr. Dyuti Yajnik), Department of Philosophy, Gujarat University, Ahmedabad. □

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7	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, 2018 and University Circular no. TAAS/(CT)/ICD/2018-19/1241 dated 26th March, 2019 and revised from time to time”.

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, MATUSHRI KANBAI LALBAI AND MOTIBAI LOHANA KANYASHALA AND BALIKAGRUH, B.L. AMLANI COLLEGE OF COMMERCE & ECONOMICS & M.R. NATHWANI COLLEGE OF ARTS, N S Road No 6, JVPD Scheme, Vile Parle(W), Mumbai - 400056 within 15 days** from the date of publication of this advertisement. **This is University approved advertisement.**

Sd/-
Chairman

NOTIFICATION!

Withdrawal of Advertisement

The advertisement for the position of 'Vice Chancellor' to be filled in the Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar published on Page No. 46 of the *University News --Volume 61, Issue 22*, dated May 29 to June 04, 2023, is an inadvertent repetition of the old advertisement published in University News on 06.06.2022 and it has no relevance in the present context.

THE ADVERTISEMENT THEREFORE STANDS CANCELLED AND WITHDRAWN.

The inconvenience caused is deeply regretted.

Editor, University News

ATTENTION ADVERTISERS

Advertisers are requested to send their text matter at following Email IDs:

1. advtn@aiu.ac.in

2. publicationsales@aiu.ac.in

Text matter may be sent in MS-Word document file OR in PDF file in original (as per Mechanical Data/Size of the Advertisement).

All the correspondence may be addressed to the **Under Secretary (Publication & Sales)**, Association of Indian Universities, AIU House, 16 Comrade Indrajeet Gupta Marg, New Delhi-110002.

Mob: 09818621761

Phone Office: 91-11-23230059, Extn. 208/213.

Sahyadri Parisar Shikshan Prasarak Mandal, Pachal
Shri Manohar Hari Khapane College of Arts & Commerce, Pachal
At/Post – Raypatan, Tal. Rajapur, Dist. Ratnagiri – 416 704

APPLICATIONS ARE INVITED FOR THE POST OF
PRINCIPAL
FROM THE ACADEMIC YEAR 2023-2024

AIDED

The advertisement is approved subject to the final decision in the Writ Petition No. 12051/2015.

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

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, Governments of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-1 dated 08th March, 2019 and University Circular No. TASS/(CT)/ICD/2018-19/1241 dated 26th March, 2019 and revised from time to time.” The Government Resolution and 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 **Gen. Secretary, Sahyadri Parisar Shikshan Prasarak Mandal, Pachal, Shri. Manohar Hari Khapane College of Arts & Commerce, Pachal, At/Post – Raypatan, Tal. Rajapur, Dist. Ratnagiri – 416 704 within 15 days** from the date of publication of this advertisement. **This is University approved advertisement.**

Sd/-
GEN. SECRETARY
S. P. S. P. Mandal, Pachal

**Shri Vasantao Banduji Patil Trust's
Appasaheb Birnale College of Pharmacy, Sangli**
Sangli-Miraj Road, South Shivajinagar, Sangli
Tel. (0233) 2320062, 2324360 ; Fax: 2325677
(Affiliated to Shivaji University, Kolhapur)

WANTED

B. Pharmacy Section

Applications are invited from eligible candidates for the following posts:

Sr. No.	Name of Posts	Vacant Posts	Open Posts	Reserved Posts
A.	Professor :			
1.	Pharmaceutics	01	01	--
B.	Associate Professor :			
1.	Pharmaceutical Analysis	01	01	--
2.	Pharmaceutics	01	--	SC-1
C.	Assistant Professor :			
1.	Pharmaceutical Chemistry	02	--	SC-1, VJA-1
2.	Pharmaceutical Analysis	02	01	SC-1
3.	Pharmaceutics	02	--	VJA - 1, EWS - 1
4.	Pharmacology	03	01	SC - 1, VJA - 1
5.	Pharmacognosy	01	01	--
D.	Librarian	01	01	--

Note : For detailed information about posts, qualifications and other terms and conditions please visit University website : www.unishivaji.ac.in.

Place : Sangli

Date :

President

Shri. Vasantao Banduji Patil Trust's, Sangli

Principal

Appasaheb Birnale College of Pharmacy, Sangli

**PRITI ACADEMY EDUCATION SOCIETY'S
PRITI ACADEMY DEGREE COLLEGE**
Kalyan Murbad Road Mharal - 421301

MINORITY

APPLICATION ARE INVITED FOR THE FOLLOWING POSTS

FROM THE ACADEMIC YEAR 2023-24

UN – AIDED

Sr. No	Cadre	Subject	Total No. of Posts	Category
1	Principal	–	01	01-OPEN
2	Assistant Professor	Law	04	04-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 applications through proper channel. Applicants are required to account for breaks, if any, in their academic career.

Application with full should reach the TRUSTEE / SECRETARY, PRITI ACADEMY DEGREE COLLEGE, Kalyan, Murbad Road, Mharal –421301 within 15 days from the date of publication of this advertisement. This is University approved advertisement.

Sd/-

TRUSTEE/SECRETARY

**Dinkarrao K Shinde Smarak Trust
Dr. A.D. Shinde College of Engineering**

At/Post. Bhadgaon, Tal. Gadhinglaj, Dist. Kolhapur (Maharashtra)

Email: principal.dadscoe@gmail.com

Contact No. 7411091971, 9637080191

(Affiliated to Shivaji University, Kolhapur)

(Non-Grant)

WANTED

Applications are invited from eligible candidates for the following posts **within 15 Days** from the date of publish.

Sr. No.	Name of Posts	Total Posts	Open Posts	Reserved Posts
A.	Principal	01	01	
B.	Professor			
1.	Civil Engineering	01	01	--
2.	Mechanical Engineering	01	01	--
C.	Associate Professor			
1.	Civil Engineering	03	01	SC - 1, VJA - 1
2.	Mechanical Engineering	03	01	SC - 1, VJA - 1
3.	Electrical Engineering	01	01	--
D.	Assistant Professor			
1.	Civil Engineering	12	05	SC- 2, ST - 1, VJA - 1, OBC - 2, EWS - 1
2.	Mechanical Engineering	12	05	SC- 2, ST - 1, VJA - 1, OBC - 2, EWS - 1
3.	Electrical Engineering	06	02	SC - 1, VJA - 1, OBC - 1, EWS - 1
4.	Electronics & Computer Science	01	01	--
5.	Chemistry	01	01	--
6.	Physics	01	01	--
7.	Mathematics	01	01	--
8.	English (Prof. Communication Skill)	01	01	--
E.	Librarian	01	01	--
F.	Physical Education Director	01	01	--

Place : Bhadgaon

Date : 25/05/2023

Secretary

President

SHIKSHAN PRASARAK MANDAL BANDA

RAO SAHEB GOGATE COLLEGE OF COMMERCE AND SMT

SARASWATIBAI GANSHET WALKER COLLEGE OF ARTS, BANDA

Tal. Sawantwadi, Dist. Sindhudurg, M.S. 416511

APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS

ON CLOCK HOUR BASIS FOR 2023 - 24

AIDED

Sr. No.	Cadre	Subject	No. of C.H.B Posts	Category
1	Assistant Professor	Marathi	01	01-OPEN
2	Assistant Professor	English	02	02-OPEN
3	Assistant Professor	Economics	01	01-OPEN
4	Assistant Professor	Mathematics	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-2018-19/124 dated 26th March, 2019 and revised from time to time.” Remuneration of the above post will be as per University Circular No. TAAS(CT)/01/2019-20 dated 02nd April, 2019 & University Circular No. CTAU/23/2021-2022 dated 25th January, 2022. The Government Resolution & Circular are available on the website: mu.ac.in.

Applications with full details should reach the Principal, RAOSAHEB GOGATE COLLEGE OF COMMERCE AND SMT. SARASWATIBAI GANSHET WALKER COLLEGE OF ARTS, BANDA, Tal. Sawantwadi, Dist. Sindhudurg, M.S. - 416511 within 15 days from the date of publication of this advertisement. This is University approved advertisement.

(Dr. G.G. Kajrekar)

AIU Notification for Inviting Proposal for AADC

The Association of Indian Universities, an apex-level representative body of universities and other higher education institutions in India invites proposals with an Expression of Interest (EoI) from the member universities for its newly introduced scheme i.e. Academic and Administrative Development Centres(AADC) to be established in select member universities.

AADC is a pioneering initiative of AIU which aims at organizing short-term training and capacity-building programmes for the faculty members and administrative functionaries of Indian Universities and other HEIs. Introduced in 2022, AADC is envisioned to function in a similar manner to the UGC Human Resource Development Centers operating in different universities. The focus of these centres is to provide training to faculty for online/blended mode of teaching-learning, developing e-content and using technology for continuous assessment and evaluation and research collaboration along with programmes on effective management using technology in governance and administration of universities.

Since its launching in last year, 09 Centres were approved by AIU which are functioning well and organizing the training programmes. As a policy, AIU has planned to add 10 centres each year to the list till the desired number of Centres is established. The general terms and conditions of establishing AADC are as follows:

- AADC is to be established under the banner of AIU and be named as **AIU-..... University, Academic and Administrative Development Centre**.
- AIU-AADC will offer short-term programmes of varying duration aimed at continuous capacity building of the key stakeholders through online and in-person modes.
- The Centres are to be allocated to 10 selected member universities of AIU based on their interest and required infrastructure.
- Initially, seed money of **Rs. 2.00 lakhs** will be provided by AIU as one-time financial support to each centre. Thereafter, the centers will be functioning in self-financing and self-sustaining mode
- **Rs. 1.00 Lakh** will be provided at the beginning of the first programme and the remaining One Lakh will be released after receiving the utilisation certificate from the University.
- Each Centre will organise 10 programmes in an Academic Calendar year.
- AIU will also provide academic support in identifying resource persons, planning and designing the academic aspects of the courses. The details of the programme structure, duration, selection of themes, preparation of training materials and modules, resource persons will be decided on mutual consultation and cooperation with the host/concerned university.
- A report after each programme may be submitted to AIU for documentation and publishing in University News, A Weekly Journal of Higher Education.

The proposal may be sent to **Dr Amarendra Pani, Joint Director & Head, Research Division** through email: **researchaiu@gmail.com**. In case you need any further information, you may send your queries through the email ID mentioned.

Guidelines for Academic & Administrative Development Centres (AADC)

Introduction

As the third largest Higher Education (HE) system in the world, Indian HE not only caters to students in diverse locations across the sub-continent but also is in the process of achieving 50% GER by 2035. While this requires elaborate infrastructure in place and enabling policies of inclusiveness, there is a need to create pathways of continuous learning and updating of skills and new knowledge among faculty in order to make HE quality futuristic. The Human Resource Development Centres (HRDC) set up by the University Grants Commission and the AICTE Training and Learning (ATAL) Academy offer Faculty Development Programmes (FDPs) of varying durations for newly recruited as well as for mid-career professionals. In spite of these efforts, there is still a gap between the number of courses on offer and number of faculty to be trained. Further, there have been very few programmes for the upskilling of administrative staff in the HE system so as to prepare them for the changing e-governance requirements.

It is in this context that the Association of Indian Universities (AIU) proposes to set up Academic & Administrative Development Centres (AADC) in collaboration with universities across India. While the AIU will provide a seed money of Rupees Two Lakhs to set up the AADC, the programmes will be conducted on a self-sustainable basis.

Objectives of AADC

- Provide continuous knowledge and skill acquisition and enhancement for faculty in order to contribute effectively to the changing landscape of HE
- Train administrative staff in higher education institutions with appropriate skills to adapt to emerging information technologies
- Prepare library professionals and other technical staff in HEIs to contribute to knowledge cum learning and research resources as per the global demands and the local needs
- Introduce research scholars to the principles of academic integrity and professional ethics

Thrust Areas of AADC Programmes

The AIU-AADC will offer short term (one week) programmes aimed at continuous capacity building of the key stakeholders through online and in person modes. The thrust areas envisaged for the programmes include but are not limited to the following:

- Identifying the different components of online teaching and learning
- Designing e-content, open educational resources and adopting innovative in structural delivery models
- Mapping and matching pedagogies and technologies
- Exploring new knowledge domains
- Producing high quality and high impact research publications
- Identifying appropriate impact factor journals for submission of manuscripts for publication
- Preparing winning project proposals
- Addressing local needs and realities through research in sync with Scientific Social Responsibility (SSR)
- Integrating research and innovation in order to foster the entrepreneurial spirit among teachers and learners

contd....

- Reinforcing academic integrity and professional ethics
- Fore grounding innovation and start up ecosystem to train graduates to be job providers rather than job seekers
- Tapping CSR and philanthropy funding
- Adopting thrifty measures in resource mobilization and its optimal utilization
- Understanding and training of the e- governance models
- Using information and communication technologies (ICTs) in day-to-day administration
- Utilizing and enhancing teaching-learning resources with a view to make the library an information hub and knowledge house for the HEI
- Forging national and international research collaborations and industry linkages
- Fostering decentralization of administration with appropriate checks and balances
- Documenting best practices in teaching-learning, research and administration
- Creating quality benchmarks for the emergence of multiple levels of academic leadership
- Analysing ways of aligning institutional vision with local, regional, national and global needs in order to achieve the proposed goals of NEP 2020 as well as SDG goals.

Intended Participants

The participants of the AADC programmes include entry level, mid-career and senior Faculty, Research Scholars, Educational Administrators, Information Professionals, Technical Personnel and Academic Leaders. Programmes are to be designed as 'level-wise ladder type' schedules for the various cadres of faculty members and administrators with specially structured programmes for Research scholar's

Financial Model

The AIU will provide a seed grant of Rupees Two Lakhs to set up the AADC in selected institutions based on a competitive scrutiny of invited/ submitted proposals. The fee component presented by interested institutions should include the honorarium for resource persons, handouts and course material as well as the cost involved for providing boarding for the participants. The venue for hosting the training programmes as well as the subsidized accommodation provided to the participants has to be borne by the host university.

Operational Guidelines

Every university/ HEI that wants to start an AADC will enter into an agreement with the AIU.

Every AADC will have an Advisory Committee headed by the Vice Chancellor as the Convener and will include a nominee from AIU, two members of the IQAC, two senior academics and two senior administrators as well as two external experts as Members. The Coordinator of the Centre to be nominated by the Vice Chancellor, will be the Secretary of the Committee.

An Annual Calendar of Programmes will be created and circulated widely among the AIU members and displayed on the institutional website.

- Every AADC will nominate teaching, non-teaching and technical staff from among its human resources.
- The Coordinator of the AADC will be a faculty member at the level of Associate Professor and above. The coordinator will be paid a modest monthly honorarium.
- Every AADC will also have earmarked space and infrastructure within the HEI.
- Every AADC will prepare and disseminate the reports of programmes conducted in the dedicated link on the institutional website.

Association of Indian Universities

AIU Academic and Administrative Development Centres (AADC)

Structure for the Training Programs

1. Proposed programs:

(Not exhaustive, the university may add more programs upon the requirement)

(i) Use of technology in-

- a) Teaching learning/Pedagogy
- b) Research Collaboration
- c) Assessment & Evaluation
- d) University Governance & management

(ii) Development of learning material and e-content

(iii) Enhancing student engagement using technology

(iv) Use of technology in-

- a) University Administration
- b) Examinations
- c) Finance

2. Duration of the Programme- 8-10 days

3. Frequency of Programme- 10 per annum

4. Resource Persons (Details and Contact No.)-Please engage the quality resource persons.In case the need is felt, AIU can suggest experts.

5. Mode of delivery- (Any of the following)

- a) Face to face
- b) Online
- c) Blended

6. Target Audience (No.) – Faculty/Administrators in university and colleges

7. Group Size- 25-30 approximately

8. Branding/Promotion of Programs through following social media channels would be appreciated-

- a) Twitter
- b) Instagram
- c) Linked In
- d) Facebook

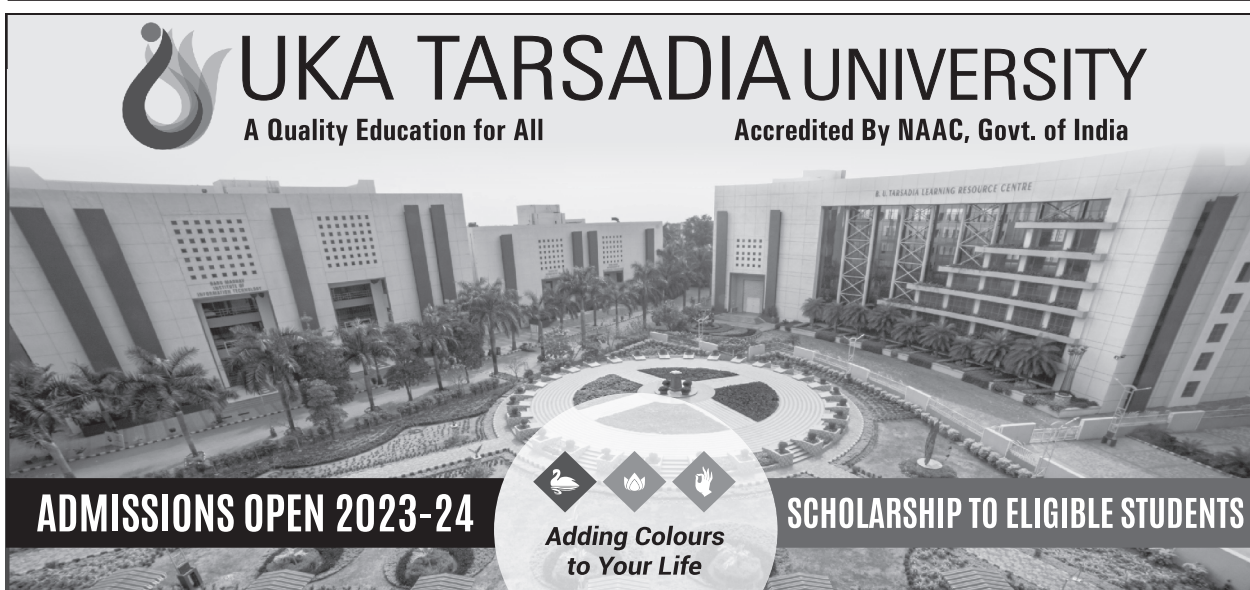
9. TA/DA-To be borne by their respective Institute sending the trainees.

10. Infrastructure Availability shall be ensured in terms of:

- a) Classroom (Smart/Conventional)
- b) Teaching Learning aid & equipment

11. Reasonable Course Fees may be levied

12. Possibility of non-commercial collaboration may be explored with Industry/ EdTech Companies.



ADMISSIONS OPEN 2023-24

SCHOLARSHIP TO ELIGIBLE STUDENTS

Engineering & Technology

• **Diploma**

Civil, Computer, Electrical, Mechanical, Chemical, IT, Environmental

• **B.Tech.**

AI & DS, Automobile, Chemical, Civil, Computer, CE (Software engineering), CSE, CSE (Cyber Security/ Cloud Computing/ AI & ML), Cyber Security, Electrical, EC, I CT, IT, Mechanical, Mechatronics

• **M.Tech.**

Pharmacy

• **B.Pharm**

• **M.Pharm**

• **Pharm D.**

• **Pharm. D. (PB)**

Humanities

• **B.A., B.A. (Hons.)**

Journalism & Mass Communication, Psychology, English

• **M.A. (English)**

Science

• **B.Sc., B.Sc. (Hons.), M.Sc.**

Physics, Mathematics, Chemistry, Biotechnology, Microbiology

• **PGDMLT**

Design, Planning a Architecture

• **Diploma in Fashion Design**

• **Diploma in Interior Design**

• **Bachelor of Fashion Design**

• **B. Arch.,**

• **Bachelor of Interior Design**

• **Diploma in Architecture Assistantship**

Computer Science

• **B.Sc. (I.T.)**

• **B.Sc. (I.T.) (Hons.)**

• **M. Sc. (I.T.)**

• **B.C.A.**

• **B.C.A. (Hons.)**

• **M.C.A**

Commerce & Management

• **BBA**

• **BBA (Hons.)**

• **MBA**

• **B.Com.**

• **B.Com. (Hons.)**

• **M.Com.**

Medical & Paramedical Sciences

• **Nursing**

GNM
Post Basic B.Sc.,
B.Sc.,
M. Sc.

• **Physiotherapy**

BPT,
MPT



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- Easy connectivity to University through more than 300 **University buses and Private mode** of transit

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