Faculty Development Programme on Integrating Technology in Higher Education: Opportunities and Challenges

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 co0nnectivism. 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.