Faculty Development Programme (FDP)

Transformational Teaching with ICT Tools to Enhance Learning

The Academic and Administrative Development Centre (AADC) at Atal Bihari Vajpayee University, Bilaspur, in partnership with the Association of Indian Universities (AIU), successfully organized a One Week online Faculty Development Programme (FDP) on **"Transformational Teaching with ICT Tools to Enhance Learning"** from July 03-08, 2023. The program sought to provide instructors with cutting-edge teaching techniques and practices, utilizing Information and Communication Technology (ICT) resources to improve students' overall learning. Following are main objectives of the FDP.

- ✓ Introduce the teachers to the many ICT tools and technologies that can improve the process of teaching and learning.
- ✓ Give teachers the freedom to create innovative teaching strategies that can meet the varied requirements of their students.
- ✓ In the context of teaching during trying times, like the COVID-19 pandemic, emphasize the value of ICT.
- ✓ Demonstrate how ICT may be used effectively even with little funding, making education more widely available.

At the opening ceremony, Prof. M.K. Verma, the Vice Chancellor of CSVTU in Durg, attended as the chief guest, while Prof. A.D.N. Bajpai, the Vice Chancellor of Atal Bihari Vajpayee University, presided over the proceedings. The welcome speech was given by Dr. Rashmi Gupta, the FDP Coordinator, who also gave a thorough rundown of the program's goals. In his speech, Prof. M.K. Verma underlined the significance of incorporating ICT tools into the educational process and their potential to create interactive and interesting learning environments. Additionally, he emphasized how ICT was essential in ensuring the uninterrupted education during the difficult time of the COVID-19 pandemic. Prof. A.D.N. Bajpai emphasized the resourcefulness of ICT in teaching, especially in situations where institutions face limited resources. He encouraged the faculty to explore creative and innovative pedagogical approaches that maximize the benefits of ICT tools, ensuring an enriched learning experience. Prof. H.S. Hota, convenor of the program, thanked everyone who attended and thanked the officials and planners for their important work. He expressed gratitude for the university and AIU's joint efforts in putting together the stimulating FDP and hoped that the faculty would use the newfound knowledge and abilities to improve the teaching and learning processes for students.

Prof. Ashish Verma from Dr. Harisingh Gaur University, Sagar delivered the first lecture during the One Week Online Faculty Development Programme. The lecture focused on offering an insightful introduction to Information and Communication Technology (ICT) tools for teaching, with the goal of equipping faculty members with the information they need to effectively integrate technology into their pedagogy. Prof. Ashish Verma kicked off the seminar by outlining the essential ideas of ICT and their importance in modern education. He underlined how information and communication technology (ICT) has transformed the teaching-learning process, allowing educators to build dynamic and engaging learning environments. The talk highlighted a variety of ICT tools that can be used to improve teaching approaches and student outcomes.

Dr. Suraj Sharma, a respected faculty member of Guru Ghasidas Central University in Bilaspur, delivered the second lecture. The topic of the FDP was "Google G Suite for Education," a powerful suite of collaborative tools designed to better the teaching and learning process. Dr. Sharma demonstrated

how the various Google G Suite applications, such as Google Drive, Docs, Sheets, Slides, Forms, and Classroom, work together effortlessly and can enhance effective content production and collaboration. Google Classroom, which allows teachers to effortlessly manage virtual classes, assign tasks, and provide student feedback, received a lot of attention. The lecture stressed the platform's collaborative characteristics, encouraging students to work as a team and exercise critical thinking.

Prof. Sanjay Kumar, a respected faculty member from Pt. Ravi Shankar Shukla University in Raipur, delivered the third lecture. The main topic of the session was "Digital Education," with the goal of highlighting the significant contribution that technology has made to the change of traditional teaching practices. Dr. Kumar provided an in-depth overview of digital education, outlining its guiding principles, advantages, and disadvantages. He emphasized how technology has revolutionized the educational landscape by giving cutting-edge tools and ways for engaging students in an increasingly digital world. The presentation also went through a variety of online tools, digital learning platforms, and e-learning resources that teachers may use to create interesting and personalized learning experiences. The significance of blended learning methodologies, which combine online components with traditional classroom training, was also underlined.

The Fourth lecture was delivered by Dr. Prashant Vaishnav from Guru Ghasidas Central University, Bilaspur. The focus of the lecture was on the concept of "Gamification of Teaching," where Dr. Vaishnav introduced the attendees to the powerful approach of incorporating game elements into the learning process to enhance student engagement and motivation. He explained the benefits of gamification in teaching, including fostering active learning, critical thinking, and problem-solving skills among students. Dr. Vaishnav showcased various gamification strategies such as points, badges, leaderboards, and leveling up, which can make learning more interactive and enjoyable. Moreover, he explored the concept of game-based learning, where educational games and simulations are used to reinforce subject matter in a fun and immersive manner. The lecture also covered gamification tools and platforms available to educators for designing and implementing gamified learning activities.

The fifth lecture was presented by Dr. Rashmi Gupta from Atal Bihari Vajpayee University, Bilaspur, focusing on "AI Assisted Content Creation." Dr. Gupta investigated several AI-powered content generation applications, such as the creation of images, videos, and PowerPoint presentations, resumes, and music. The talk emphasized how AI technology may streamline and improve content creation processes, making them more effective, imaginative, and individualized. Participants were intrigued by the potential of AI-generated content and were inspired to apply these cutting-edge tools to their professional endeavors and teaching methodologies in order to improve various aspects of content creation as well as students' learning experiences.

The sixth lecture by Dr. Neeraj Rathore provided valuable insights into the transformative potential of AI in education. Participants learned about the different applications of AI during the workshop, including personalization, intelligent tutoring systems, learning analytics, and automated assessment. The interactive workshop sparked interesting discussions and motivated teachers to look into cutting-edge applications of AI to enhance their teaching methods and create more successful and personalised learning environments for their pupils. The speech inspired the audience and left them ready to implement AI-based tools and methods into their instructional practices, promising to enhance student learning outcomes and foster academic accomplishment.

The seventh lecture was conducted by Dr. Gaurav Khare from MITS Gwalior. The lecture focused on "Online Collaborative Tools for Group Projects," exploring various digital platforms and technologies that facilitate seamless collaboration among students working on group assignments and projects. Dr. Khare gave a demonstration of how these tools enable real-time communication, file sharing, task

assignment, and progress tracking, enabling efficient teamwork and increasing the general efficiency and productivity of group projects.

The eighth lecture was presented by Dr. Sharddha Masih, focusing on the subject of "ChatGPT: Applications and Enhancing Learning." The participants were given a brief introduction to ChatGPT by Dr. Masih, an advanced AI language model created by OpenAI. The talk gave an incisive overview of ChatGPT's design and features, highlighting how it can produce text that sounds like human speech and promote interactive dialogue. Dr. Masih investigated ChatGPT's numerous educational uses and showed how it might be used to give students tailored feedback, interactive learning opportunities, and immediate answers to their questions. The interactive session allowed participants to engage with Dr. Sharddha Masih, seeking clarifications and exchanging ideas on integrating ChatGPT into their teaching methodologies.

The ninth lecture was conducted by Dr. Rohit Raza from Guru Ghasidas Central University. The lecture focused on "Augmented Reality/Virtual Reality Tools for Teaching," providing an insightful introduction to these immersive technologies. Dr. Raza showcased how Augmented Reality overlays digital content onto the real-world environment, while Virtual Reality creates an entirely virtual world for users to immerse themselves in. He demonstrated the diverse applications of AR/VR tools in education, highlighting how these technologies can transform science education by offering interactive visualizations and simulations for complex concepts. Dr. Raza also emphasized the value of AR/VR for skill-based training, such as medical simulations and vocational training, providing a safe and cost-effective environment for hands-on practice. The tenth lecture was presented by Dr. Teerath Prasad Sahu from the National Institute of Technology, Raipur. The lecture focused on the topic of "Virtual Tutoring Systems and Chatbots," showcasing the revolutionary potential of these AI-powered tools in the realm of education. Dr. Sahu gave an excellent overview of virtual tutoring systems, emphasizing how they may give students real-time feedback, individualized learning paths, and adaptive support. He investigated several virtual tutoring tools, such as AI-driven tutoring platforms, interactive e-learning modules, and tailored assessment systems, that might be included into the teaching process. He also gave an example of how chatbots, a type of virtual tutoring system, can perform common administrative duties including responding to frequently requested queries, setting up appointments, and sending out reminders on time. The talk emphasized the value of tailored learning support and demonstrated how chatbots and virtual tutoring systems may adapt content to suit unique learning preferences, enhancing students' learning experiences. The eleventh lecture was presented by Mr. Gaurav Rawal, a distinguished National Level Police Trainer. The lecture delved into the critical topic of "Ethical and Legal Aspects of Modern Age AI Tools," highlighting the importance of addressing ethical considerations in AI usage, such as bias in algorithms, privacy concerns, and the broader societal impact of AI technologies. Mr. Rawal also discussed the legal framework for AI, including current laws and new legislation aiming at ethical and responsible AI use. The discussion illuminated the ethical ramifications of AI in particular fields, such as employment, education, and law enforcement. Participants learned about ethical AI techniques, placing an emphasis on accountability, openness, and justice. The Faculty Development Programme concluded on a high note with a grand valedictory function held on the last day. Prof. Amarendra Pani, Joint Director of AIU, was the Chief Guest. The participants shared positive feedback about the program, emphasizing its value in enhancing their teaching practices using ICT tools. Prof. Amarendra Pani, the Chief Guest, addressed the audience and emphasized the importance of integrating ICT tools in teaching practices. He commended the participants for their dedication to professional development and encouraged them to continue leveraging technology to create dynamic and engaging learning experiences for their students. Dr. Rashmi Gupta, the Coordinator of the program, proposed a vote of thanks, and certificates were distributed to the participants to recognize their commitment to professional development.

Participants were inspired to put their new knowledge to use by designing learning opportunities for their students that would alter their classrooms. Valedictory Function Certificates were given to the participants after examination. In this faculty development programme 87 participants were registered and certificates were distributed to 78 participants after test.