

AIU-VGU-AADC: Faculty Development Programme: “Pravaah”

FDP- IX: Leveraging AI to Transform Teaching and Learning in Higher Education

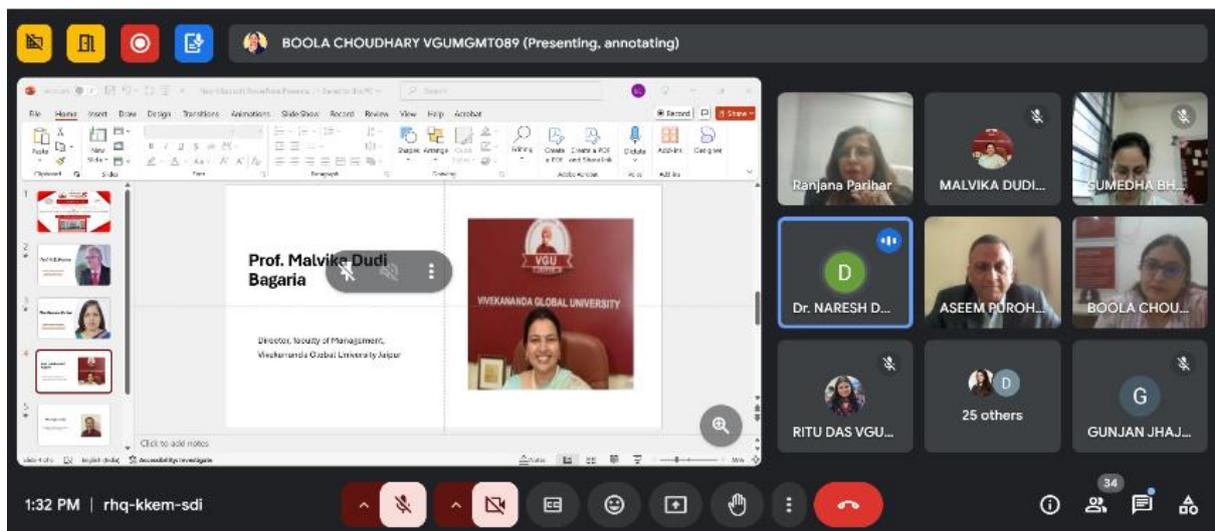
18th to 22nd November 2024

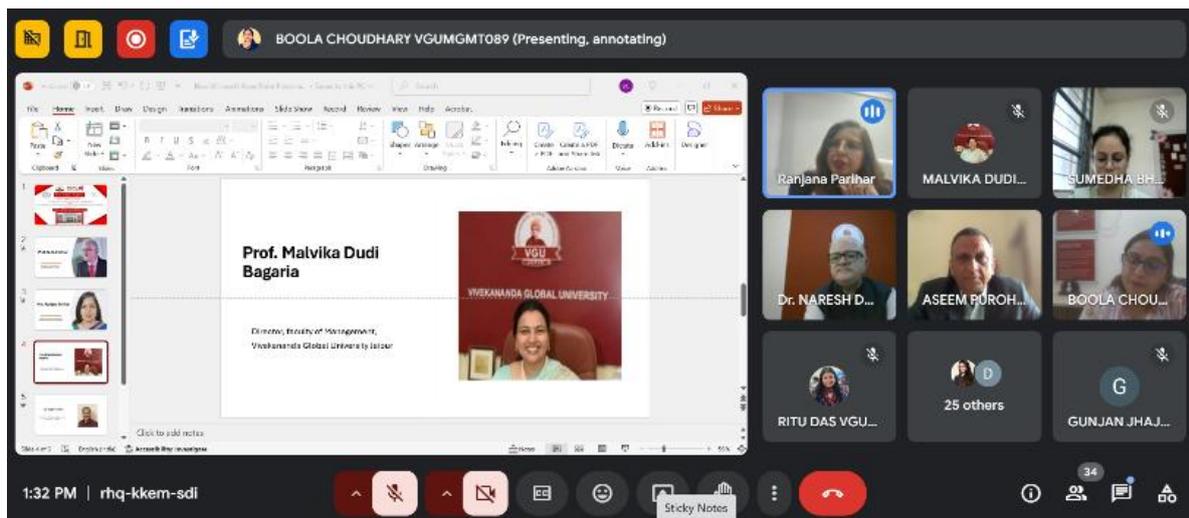
Report

Day 1: 18th November 2024

Inaugural Session- 1:00 pm to 1:30 pm

The Faculty Development Programme – IX under “Pravaah” commenced with an interactive inaugural session on 18th November 2024. The focus of the FDP was “Leveraging AI to Transform Teaching and Learning in Higher Education”. Mr. Assem Purohit extended a warm welcome to the dignitaries and participants. Mr Purohit invited Prof. N.D. Mathur for the welcome address and Mrs Ranjana Parihar for the special address. The esteemed Professor N.D Mathur, the President of VGU, inaugurated the FDP. He stressed the need for innovative teaching strategies with the help of AI in today’s education system. Professor Mathur also highlighted how AI can save time for both educators and students while enabling personalised learning experiences. Additionally, he discussed how AI-driven data generation can provide valuable insights to shape a more effective and adaptive future for education. Special address by Mrs Ranjana Parihar, Joint Secretary, Printing & Publications, AIU-AADC. She reflected on the vision that inspired the initiation of the program and expressed her excitement about the remarkable progress made today. Mrs. Ranjana also thanked Vivekananda Global University’s team for making “PRAVAAH” a grand success. She asked everyone not to take AI as a replacement but to take it as a compliment. The session was concluded by Mrs Malvika Dudi Bagaria, Director at Vivekananda Global University, who gave a warm welcome to the participants and thanked everyone for joining the session. The inaugural session was successfully conducted, setting a positive tone for the rest of the FDP.





Session I- 1:30 pm to 3:00 pm

Resource Person- Dr. Sagar Suresh Gupta, Assistant Professor, Marwadi University, Rajkot

Topic- What is AI? Understanding its Impact on Higher Education

The subject expert delivered an engaging presentation covering a wide array of AI-related topics, beginning with a foundational overview of AI and its evolution. Key concepts such as Machine Learning (ML) and its predictive capabilities were explained, along with the different types of learning: supervised, unsupervised, and reinforcement learning. The speaker delved into neural networks, deep learning, and Convolutional Neural Networks (CNNs), highlighting their relevance in AI development. Real-world applications of AI, ML, and deep learning were discussed with illustrative examples, particularly in educational settings. The session also explored the future of AI, focusing on its potential benefits, ethical considerations, and its integration into higher education, including admissions processes. Challenges and considerations related to AI implementation were addressed, providing a balanced view of the opportunities and obstacles in this domain. The discussion was enriched with examples of AI features integrated into educational tools, offering participants practical insights into how AI can transform learning environments. Overall, the session was highly informative and provided a comprehensive understanding of AI and its applications.

Session II- 3:00 to 4:30 pm

Resource Person: Mr. Yashwardhan Singh, Assistant Professor, St. Xavier's College, Jaipur

Topic: AI-Powered Tools for Modern Educators

The session provided insightful perspectives on integrating artificial intelligence into modern educational practices. The resource person of the session commenced by introducing AI and Large Language Models (LLMs) such as GPT-4, Claude, and BERT. He emphasised their transformative potential in automating and enhancing text-based tasks, including text generation, language translation, content summarisation, and code generation. The relevance of these tools in streamlining educators' workload and enhancing classroom engagement was clearly articulated. The session then delved into Prompt Engineering, the strategic art of

crafting inputs to optimize AI outputs. Mr. Singh highlighted its importance in maximizing AI effectiveness, explaining key principles such as clarity, specificity, and contextual relevance. He outlined the structural components of prompts, including setting roles, defining contexts, and tailoring tone and style. To solidify understanding, participants engaged in a hands-on exercise, exploring prompt engineering techniques. The interactive approach fostered a deeper comprehension of the topic, equipping educators with actionable skills to integrate AI in teaching.

Day 2

Session I: 1:30 pm -3:00 pm

Resource Person: Dr. Anju Singh, Assistant Professor, Symbiosis School of Online & Digital Learning, Pune

Topic: AI for Personalized Education and Adaptive Learning

The session highlighted innovative strategies to enhance student engagement, motivation, and participation through the integration of AI. The discussion emphasized the role of gamification in creating interactive learning environments. By incorporating game-like elements such as rewards, leaderboards, and challenges, educators can make learning more engaging and enjoyable. The session also showcased AI applications for providing real-time feedback and support, including chatbots, personalized recommendation systems, and performance analytics, which enable timely and constructive student guidance. Case studies of AI-powered tools demonstrated their potential in boosting motivation. Examples included platforms that adapt learning content to individual needs and gamified AI systems that maintain high participation levels. The session effectively bridged theoretical insights with practical applications, empowering educators to adopt AI and gamification to foster dynamic and student-centred classrooms.

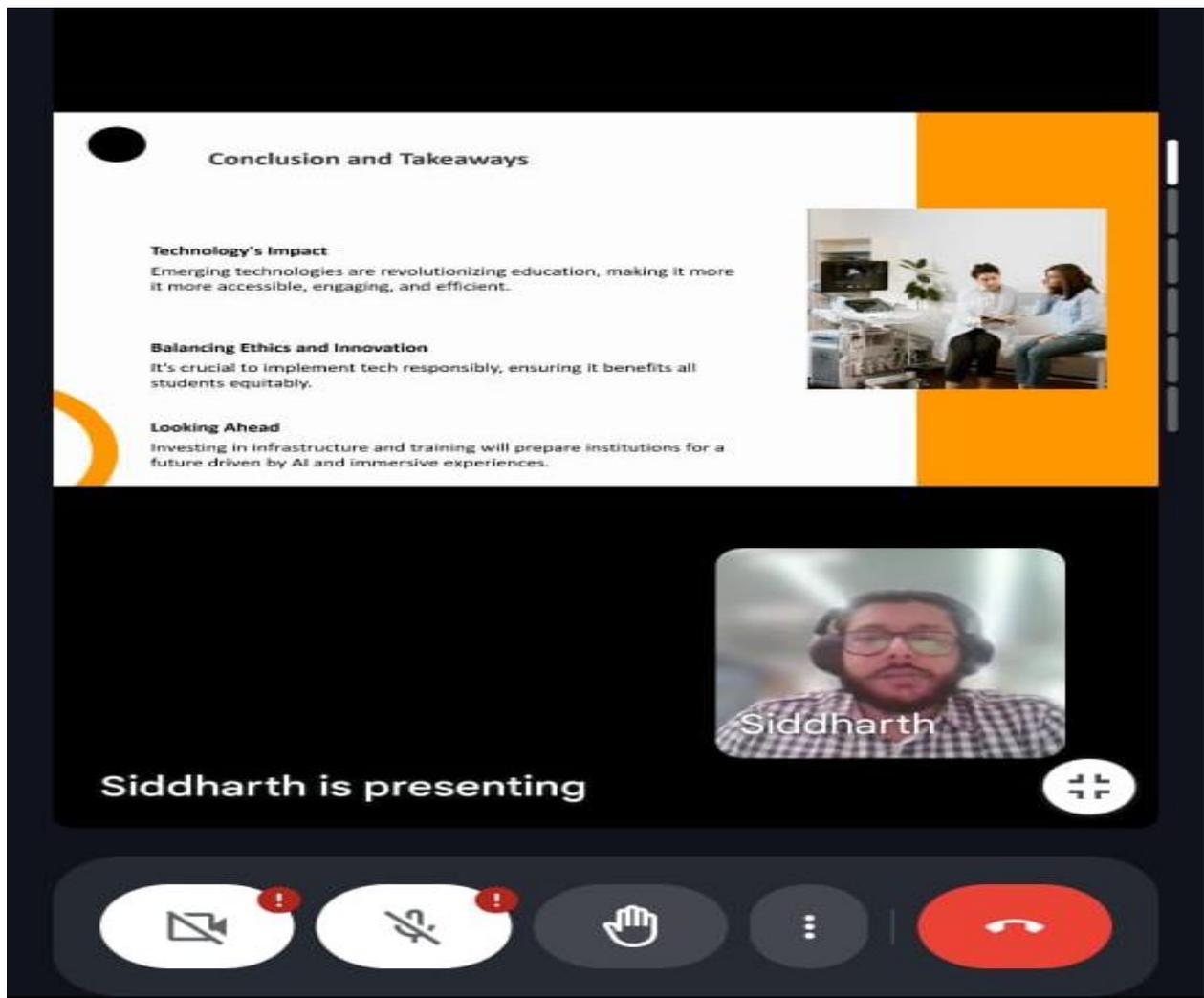


Session II: 3:00 pm - 4:30 pm

Resource Person: Mr. Siddharth Varshney ADSMN, Mumbai

Topic: AI-Driven Student Engagement and Motivation

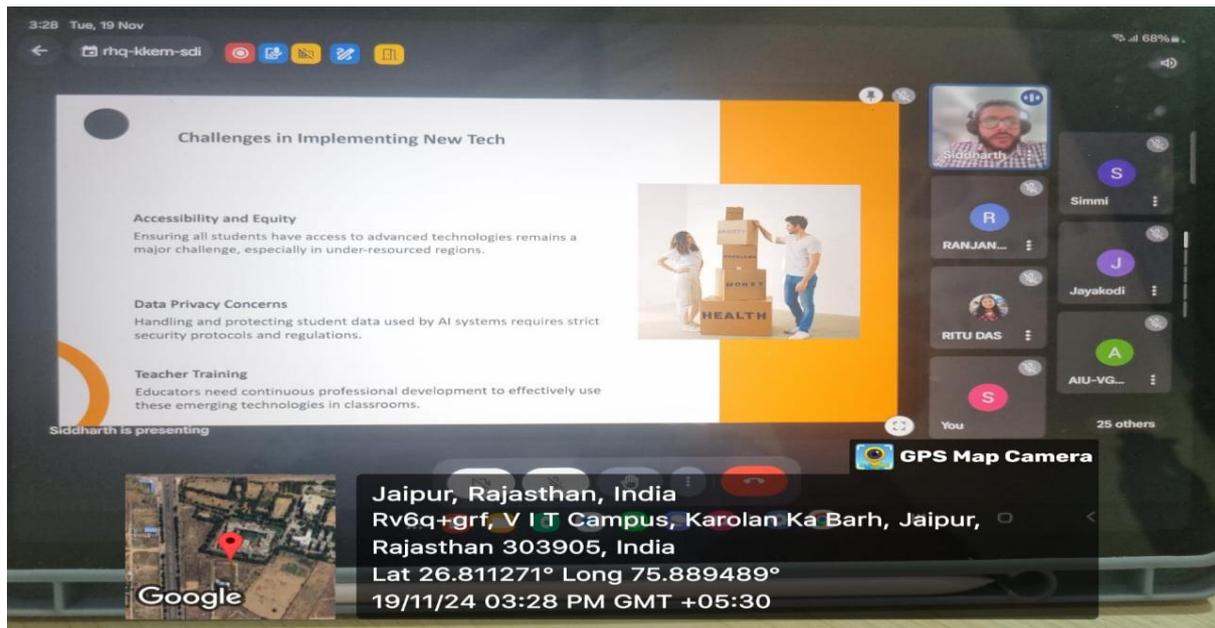
The session commenced with an introduction of the speaker by Ms. Simnu Bhatia, followed by an engaging discussion on transformative educational technologies. The speaker covered key topics, including gamification, which enhances student engagement through game-based learning elements, and AR, VR, and XR, which offer immersive educational experiences. The session addressed challenges in adopting new techniques, such as infrastructure limitations and the need for faculty training, along with ethical considerations surrounding data privacy and equity in education. The importance of collaborative platforms and global education was emphasised, highlighting their role in fostering cross-cultural knowledge exchange. Additionally, the speaker explored future possibilities in education, envisioning a landscape where AI continues to revolutionise learning through personalised education and advanced data analytics. Practical examples showcased AI's ability to tailor learning experiences, optimise content delivery, and streamline administrative processes. The session provided a comprehensive overview of how emerging technologies can reshape the educational paradigm, with actionable insights for educators to enhance their pedagogical strategies and adapt to the evolving landscape.



The screenshot displays a Zoom meeting interface. The main content area shows a presentation slide with the following text:

- Conclusion and Takeaways**
- Technology's Impact**
Emerging technologies are revolutionizing education, making it more accessible, engaging, and efficient.
- Balancing Ethics and Innovation**
It's crucial to implement tech responsibly, ensuring it benefits all students equitably.
- Looking Ahead**
Investing in infrastructure and training will prepare institutions for a future driven by AI and immersive experiences.

Below the slide is a video feed of the presenter, Siddharth, who is wearing a checkered shirt and glasses. The text "Siddharth is presenting" is visible below the video feed. At the bottom of the screen, there is a control bar with icons for chat, mute, video off, hand raise, and end call.



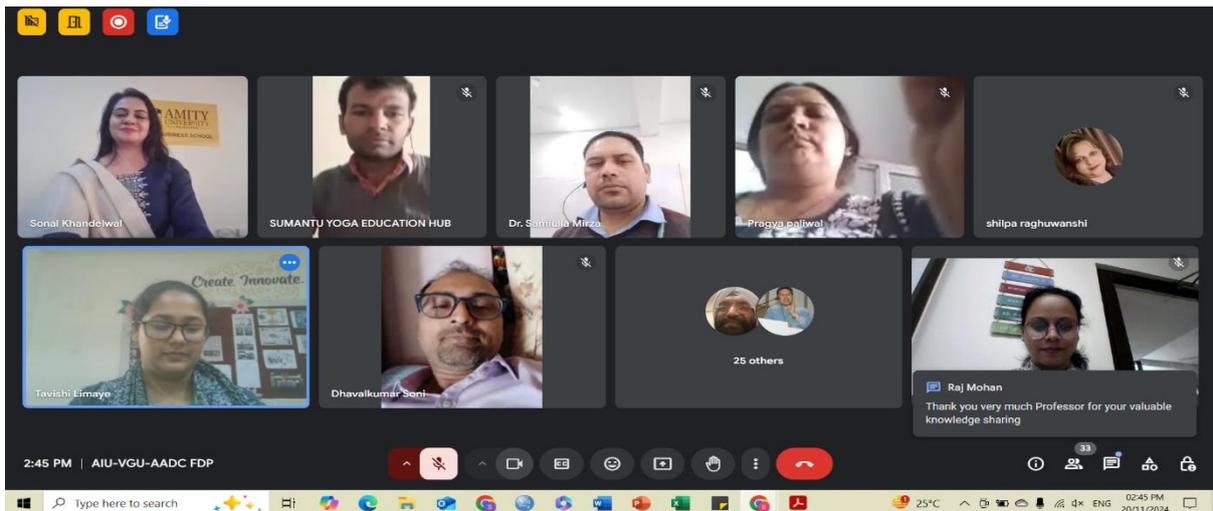
Day 3

Session I: 1:30 pm -3:00 pm

Resource Person: Dr. Sonal Khandelwal, Assistant Professor, Amity University, Jaipur

Topic: AI for Real-Time Assessment and Formative Feedback

The session highlighted the transformative role of AI in modern assessment practices. Dr. Khandelwal discussed how AI technologies are revolutionising exam design, grading, and plagiarism detection. Tools that automate grading for objective tests and evaluate subjective submissions, such as essays and projects, were explored. These tools not only ensure consistency but also save valuable time for educators. The session also addressed plagiarism detection systems, which utilise advanced algorithms to verify the originality of student work, promoting academic integrity. Ethical concerns, including data privacy, algorithmic bias, and over-reliance on automation, were deliberated, emphasising the need for responsible AI integration. In conclusion, the session provided educators with insights into leveraging AI for efficient, ethical, and effective assessment practices, paving the way for enhanced student learning experiences.

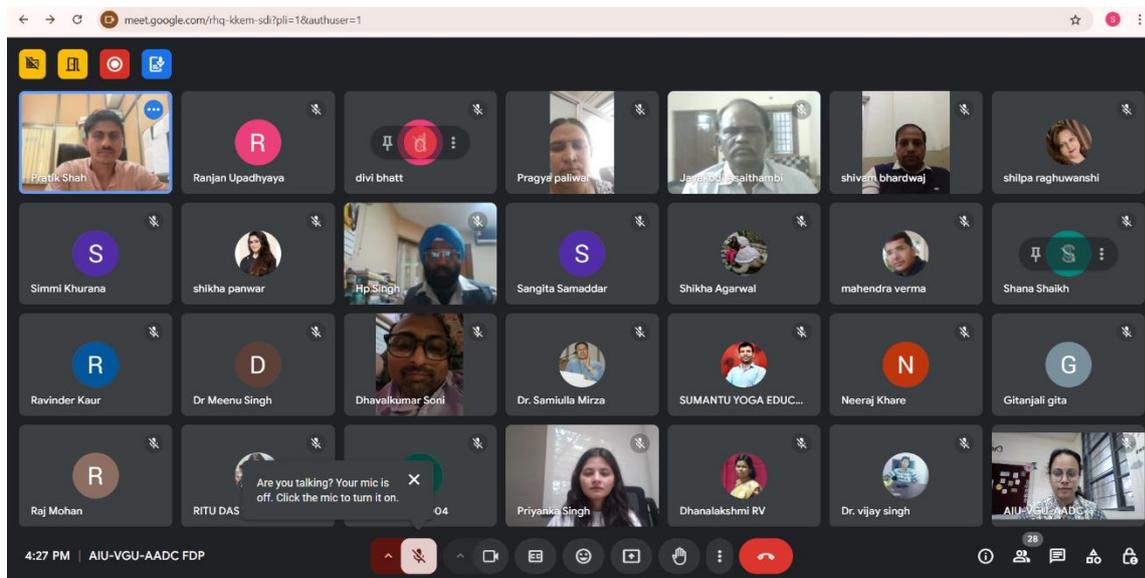


Session II: 3:00pm- 4:30pm

Resource Person: Dr. Pratik Shah, Assistant Professor, IIT Vadodara

Topic: AI for Summative Assessment: Designing and Grading Exams

The speaker began by contrasting summative and formative assessments, emphasising their unique roles in measuring learning outcomes and providing ongoing feedback. Key focus areas included the use of AI for designing and grading summative assessments, showcasing how AI tools streamline exam creation, ensure accuracy in grading, and enhance objectivity. The session highlighted significant evaluation reforms in education, advocating for more inclusive and adaptive systems that leverage AI capabilities. The speaker delved into AI tools that aid in scaling education, such as automated test creation, real-time feedback systems, and personalised learning pathways. A discussion on item difficulty in test design emphasised the importance of balancing challenge levels to accurately assess learner capabilities. Case studies and research papers provided practical insights, illustrating successful AI integrations in education and their positive impact on learning outcomes. By addressing ethical considerations and challenges, the session underscored AI's potential to revolutionise assessment practices while maintaining fairness and inclusivity. This comprehensive discourse equipped educators with actionable strategies to embrace AI-driven innovations, ultimately fostering a more adaptive and efficient educational system.



Day 4

Session I: 1:30 pm- 3:00 pm

Resource Person: Dr. Bhagirath Baria, Assistant Professor, Maharaja Sayajirao University of Baroda, Vadodara

Topic: Using AI to Streamline University Administration

Dr. Bhagirath Baria conducted an insightful session on Using AI to Streamline University Administration, focusing on its transformative potential in Higher Education Institutions (HEIs). The session delved into fundamental AI concepts, supported by real-world examples and case studies, offering a practical perspective on its applications and challenges.

Dr. Baria highlighted how AI can automate critical administrative tasks such as admissions, scheduling, and student support. He elaborated on AI's ability to predict and manage student enrolment, retention, and completion rates, enabling data-driven decision-making. Additionally, he discussed the integration of AI into administrative workflows, emphasising improved operational efficiency and enhanced resource allocation.

The session also explored the future interplay between AI and HEIs, envisioning a collaborative approach where AI augments human efforts to create more personalised, efficient, and adaptive educational ecosystems. The discussion provided valuable insights into the practical concerns of adopting AI in education.



Session II: 3:00 pm - 4:30 pm

Resource Person: Dr. Shakti Kundu, Associate Professor, BML Munjal University, Gurugram

Topic: AI and Data-Driven Decision Making for Institutional Leaders

The session provided a comprehensive exploration of the ethical challenges and governance strategies associated with AI in education. The discussion began with an examination of critical ethical issues, including data privacy, algorithmic bias, and transparency. Emphasis was placed on how these factors could affect fairness and trust in AI applications used in teaching and administration. The need for clear ethical guidelines to govern AI usage in areas such as student data management and automated decision-making was highlighted. The session also focused on developing governance frameworks to ensure the responsible deployment of AI tools. These frameworks would include regular audits, stakeholder involvement, and adherence to privacy regulations to maintain accountability. In conclusion, the session underscored the importance of balancing innovation with ethical responsibility, empowering educators to implement AI tools that prioritize inclusivity, fairness, and transparency in education.

Strategic applications of AI in resource management and budgeting

One of the key advantages of AI in budgeting and forecasting is its ability to enhance accuracy and efficiency. AI algorithms can analyze a wide range of variables and data sources, including economic indicators, market trends, and organizational metrics, to generate more precise financial projections.

Traditional Budgeting and Forecasting Techniques

Traditional budgeting and forecasting have long relied on historical data and trend analysis to project future financial performance. These methods typically involve a series of manual processes, including data collection, analysis, and the creation of financial models.

BML Munjal University

Limitations of Traditional Budgeting Methods

1 Inflexibility 5 Lack of accuracy
2 Short-term focus 4 Time-consuming
3 Lack of alignment



Day 5

Session I: 1:30pm- 3:00pm

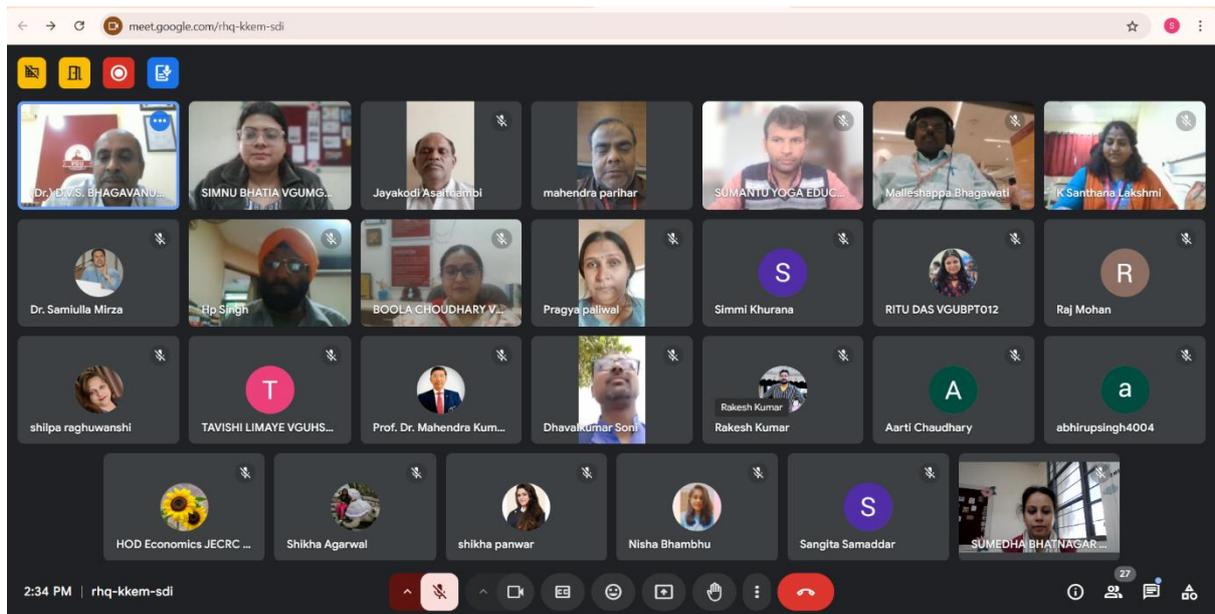
Resource Person: Prof. DVS Bhagvanulu, Pro-President, Vivekananda Global University, Jaipur

Topic: Ethical Challenges and Governance in AI in Education

Prof. DVS Bhagvanulu delivered an enlightening session on Artificial Intelligence (AI), offering a comprehensive overview of its fundamentals and real-world applications. The session covered key topics, including the major areas of AI, its integration into everyday life, and its relevance for policymakers.

Prof. Bhagvanulu emphasized the role of AI in shaping the future, highlighting its potential benefits and challenges, particularly in education. He discussed the disadvantages of AI in education, such as biases and dependency, and delved into strategies to address these ethical concerns effectively. The importance of ethical objectives and robust governance frameworks in ensuring responsible AI deployment was also emphasized.

Through examples and ethical case studies, the session provided valuable insights into the pillars of AI governance and the strategies to balance innovation with accountability. This interactive session equipped participants with critical knowledge of AI's role in society and education.



Session II: 3:00 pm- 4:30 pm

Resource Person: Fr. Sabu Thomas, Assistant Professor, English, Sacred Heart College, Kerala

Topic: Preparing for the Future: AI Innovations in Education

The session delved into the role of emerging AI technologies, including AI-powered tutors, adaptive learning platforms, and the integration of virtual reality (VR) in creating immersive learning experiences. Participants learned how these tools enhance personalised learning, enabling students to grasp complex concepts through interactive and visual simulations. The discussion also emphasised the importance of future readiness for higher education institutions. Strategies to stay ahead of AI innovations included investing in faculty training, fostering interdisciplinary collaborations, and adopting agile frameworks for integrating technology into teaching practices. By bridging the gap between innovation and implementation, the session equipped educators with actionable insights to harness AI and VR, ensuring they remain at the forefront of educational transformation. The resource person provided hands-on training to the educators on the different AI tools that can assist the educators to make the teaching-learning interactive and encourage student participation in the class. The few tools that were discussed in the session were perplexity, co-pilot, chat-GPT with the extension of sci-space, AIPRM etc.

