

## Six Days Report of Faculty Development Program(FDP) on Emerging Trends in Use of Artificial Intelligence, Research Methodology and Innovative Teaching Tools in Education, Organised by IQAC Cell Govt. College Solan H.P. w.e.f 5<sup>th</sup> may to 10<sup>th</sup> May 2025.

### Introduction

The Faculty Development Program (FDP) on *"Emerging Trends in Use of Artificial Intelligence, Research Methodology, and Innovative Teaching Tools in Education"* was successfully organized by the IQAC cell of Government College Solan from **May 5 to May 10, 2025**. The program aimed to enhance faculty expertise in AI-driven education, research methodologies, and innovative teaching tools.



### Inauguration and Opening Remarks

The program commenced on **May 5, 2025**, with a traditional **lamp-lighting ceremony** and a prayer to **Goddess Saraswati**.

**Principal, Dr. Manisha Kohli**, attended as the **Chief Guest** and addressed the gathering with an encouraging speech, emphasizing the **significance of AI, research methodologies, and innovative teaching practices in modern education**. She urged faculty members to actively participate in the sessions and make the most of this learning opportunity.

**Dr. Anil Thakur, IQAC Coordinator**, extended a warm welcome to the resource persons and participants, setting the tone for an engaging and informative FDP. He highlighted the importance of continuous learning and professional development for educators in the evolving academic landscape.

### Program Overview:

#### Day 1: May 5, 2025 (First day of FDP):

**Resource Person(1st session):** *Sh. Manish Tomar (Director, Infoviz Technology, Solan)*

**Topic:** *"Tools of AI in Education"*

Discussed AI applications in teaching, research, and academic activities, providing hands-on experience to participants.

Through expert-led discussions and hands-on training, participants developed a deeper understanding of how to integrate AI into education and research **practices** to enhance



learning efficiency and academic productivity.

- **Resource Person (2<sup>nd</sup> session):** *Dr. Piyush Sewal (Assistant Professor, Shoolini University)*
- **Topic:** *"Research Tools and Techniques"*
- Demonstrated various AI-powered research tools, emphasizing their increasing role in academic research.
- The practical demonstrations of advanced digital tools, ensured that faculty members left the FDP with enhanced expertise in cutting-edge academic technologies. The program successfully met its objectives, equipping faculty members with strategies to leverage AI for educational innovation and research excellence.



## Day 2: May 6, 2025

- **Resource Person(1st session):** *Dr. Amar Raj Singh (Director, Open & Distance Learning, Shoolini University)*
  - **Topic:** *"Artificial Intelligence in Education – Transforming Learning Experiences"*
  - Explained the prompt techniques and AI's transformative potential in education and research.
  - Dr. Singh emphasized the need for faculty members to explore AI applications in professional and daily life, enabling enhanced academic productivity, personalized teaching approaches, and efficient information retrieval. The session concluded with an interactive discussion, where participants raised queries about AI's real-world applications in education and research.
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- **Resource Person(2<sup>nd</sup> session):** *Professor C.P. Bhasin (Former Senior Professor of Chemistry, North Gujarat University, Patan)*
  - **Topic:** *"India's Education in a Global Context"*
  - Evaluated India's educational quality, rankings, and global leadership potential.
  - Professor Bhasin delivered a thought-provoking discourse on India's educational standing in the global landscape, exploring critical ranking parameters, quality assessment frameworks, and potential leadership opportunities for Indian institutions.
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### Day 3: May 7, 2025

- **Resource Person(1st session):***Dr. Kushal Kanwar (Department of Computer Science & Engineering, JUIT Waknaghat)*
- **Topic:***"Using Generative AI Tools in Research"*
- Dr. Kanwar conducted an interactive, hands-on session, where he demonstrated **how ChatGPT** can be effectively used for various academic and research purposes. His workshop provided practical applications of generative AI, ensuring faculty members gained first-hand experience in utilizing advanced AI-powered tools.
- He also provided hands-on practice on Research Rabbit, NotebookLM, SciSpace, Sora, and Descript etc.



- **Resource Person(2<sup>nd</sup> session):***Sh. Manish Tomar (Director, Infoviz Technology, Solan)*
- **Topic:***"Cybersecurity and AI Tools for Teaching"*
- Sh. Tomar's presentation emphasized **the practical implementation of AI tools**, ensuring faculty members received **hands-on training** in various digital platforms that enhance educational methodologies.
- He conducted hands-on training on ChatGPT, Sora, Leonardo, ElevenLabs, Animaker, Suno, Heygen, and shared cybersecurity tips.



#### Day 4: May 8, 2025

- **Resource Person (1st session):**Dr. Maneesha Kohli (Principal, Government College Solan)
- **Topic:**"Traditional Knowledge – Ways to Protect It"
- Highlighted India's traditional diversity and intellectual property rights in preserving cultural heritage.
- She explored how AI can document, preserve, and integrate traditional knowledge into mainstream education, aligning with **NEP 2020**.



- **Resource Person (2<sup>nd</sup> session):**Dr. Bharti Sharma (Assistant Professor, Political Science, Graphics Era University Dehradun)
- **Topic:**"Integrating Indigenous Knowledge Systems (IKS) in Higher Education"
- Explored the challenges and strategies for integrating IKS into NEP 2020.
- She Emphasized the importance of inclusive pedagogy that respects Indigenous traditions and enhances research methodologies



## Day 5: May 9, 2025

- **Resource Person (Both sessions):** *Balbir Singh Thakur (HOD, Computer Science Engineering, UIT, HPU Shimla)*
- **Topic:** *"AI in Education"*
- Discussed AI tools for education and their potential to transform learning and teaching environments.
- AI-powered tools like **Khan Academy, Duolingo, Grammarly, Google Bard, ChatGPT, BYJU'S, and Canva** were introduced, demonstrating their impact on adaptive learning, content creation, research, and student engagement.



- Discussions covered lesson planning, assessment automation, and individualized learning paths, making education more efficient, inclusive, and student-centric.
- The session also highlighted key ethical considerations in AI, emphasizing the importance of responsible data usage and fairness in algorithms. **Data privacy risks** were discussed, focusing on safeguarding student information and ensuring secure AI implementation. Additionally, **bias in AI algorithms** was addressed, stressing the need for transparent, equitable AI systems to prevent unfair outcomes.



## Day 6: May 10, 2025 (Last day of FDP):

- **Resource Person:** Prof. (Dr.) Dev Dutt Sharma (Professor of Geography, HPU Shimla & Former Vice Chancellor, Sardar Patel University, Mandi)
- **Topic:** "National Education Policy 2020 – Reforms and Implementation Strategies"
- Explored NEP 2020's role in educational transformation with a focus on accessibility, quality, and systemic restructuring.
- Prof. Dev Dutt Sharma's lecture on NEP 2020 highlighted key reforms, including the **5+3+3+4 curriculum structure, emphasis on foundational literacy, multilingual education, and a mandatory four-year teacher training degree** by 2030. He discussed higher education flexibility, increased investment in education, and global digital expansion to enhance learning standards.



## Valedictory Session:

Following the enlightening academic discourse, the **valedictory session** commenced with a formal honoring of the **Chief Guest** and **Guest of Honor**.

- The **Chief Guest, Principal Dr. Maneesha Kohli** in her address, **underscored the transformative role of Artificial Intelligence (AI) in contemporary education**. She highlighted how AI-driven tools and methodologies could enhance teaching effectiveness, improve personalized learning experiences, and streamline administrative functions. She congratulated **all faculty members and the IQAC team** for their dedication and successful organization of the **six-day Faculty Development Program**, which provided enriching insights into various educational advancements.
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- Following this, the **Guest of Honor, Prof. Dev Dutt Sharma**, delivered his speech and as part of the **certification ceremony**, he personally distributed certificates to all participants, acknowledging their commitment to professional development and continuous learning.

### **Summary of FDP & Conclusion:**

A concise report on the six-day **Faculty Development Program** was presented by **Dr. B.N. Kamal**, summarizing the key themes and academic sessions conducted during the event. Finally, **Dr. Anil Thakur, Coordinator of IQAC**, delivered a heartfelt vote of thanks, expressing deep gratitude to Principal **Dr. Maneesha Kohli**, all resource persons, participants, and organizers for their valuable support and active engagement throughout the FDP. He acknowledged the efforts of the faculty members and organizing team and assured to organize such programs in future also to enhancing academic excellence and educational leadership.



With this, the Faculty Development Program concluded on a successful and positive note, leaving participants enriched with newfound perspectives, innovative teaching strategies, and a deeper understanding of educational policy reforms.