Government College of Education Sector 20-D Chandigarh

Notice **Date 14.09.2026**

This is to inform the faculty and the students of the college that the Mathematics Department is organizing an **Experiential Workshop** for all the currently enrolled Mathematics Teacher Trainees titled as " ***AI in Mathematics Teaching: Exploring New Pedagogical Possibilities***" on **15.09.2926 (Tuesday) from 10:20 am to 12:00 pm** in the seminar room.

14/9/2026

Teacher Incharges
Dr Nisha Singh
Dr Upasana Thapliyal

Principal
GCE-20 D, Chd

For

- Circulation among staff
- Students' Notice Board
- Website Update

Government College of Education, Sector 20 D, Chandigarh

REPORT Date: 15.09.2026

Experiential Workshop on "AI in Mathematics Teaching:
Exploring New Pedagogical Possibilities"

A workshop titled "AI in Mathematics Teaching: Exploring New Pedagogical Possibilities" was organized for the Mathematics Teacher Trainees enrolled in the current session of GCE-20 D Chandigarh in the Seminar Room under the guidance of Dr. Nisha Singh and Dr. Upasana Thapliyal. The main purpose of the workshop was to make the teacher trainees familiar with the growing role of Artificial Intelligence and different digital tools in mathematics teaching and learning. The workshop was not only informative but also included demonstrations, which made it more interesting and easier to understand. The subject incharges guided the students about various digital tools and how to use them.

The workshop was organised by the team of students (Aakriti, Saloni,Yana,Kajal and Harleen) that began with a warm welcome, followed by an introduction on the uses of AI in Mathematics Teaching. The introduction was presented by Amisha and Pankaj. They explained the basic idea of AI and how it can be used in education. The introduction gave a clear idea that AI can support teachers in many areas and can also provide students with new ways of learning mathematics.

After the introduction, students presented demonstrations of different digital tools which can be used in mathematics teaching.

Demonstration on Khanmigo

The first presentation was on Khanmigo, presented by Anuj Singh and Meemansa. Several useful features of Khanmigo were demonstrated that can be helpful for teachers in preparing lesson plans, creating test booklets, designing learning activities and providing support to students.

The demonstration helped in understanding that AI tools can save teachers' time and can assist them in preparing effective classroom material.

Demonstration on GeoGebra

The second presentation was on GeoGebra, presented by Sirjan, Sakshi and Harshita. GeoGebra is a very useful tool for mathematics because it provides visual representations of mathematical concepts. The demonstration showcased how graphs, geometrical figures and mathematical relationships can be represented visually. Instead of only explaining a concept on the blackboard, a teacher can use GeoGebra to show the concept in an interactive and concrete manner. This can make mathematics more interesting and can help students understand concepts through observation.

Demonstration on Desmos

The third presentation was on Desmos by Diamond, Anshika Thakur and Anshika Walia. Desmos was demonstrated as a useful tool for mathematical visualization and observation. With the help of graphs and interactive features, students can observe transitions from static to dynamic, how changes in one value affect another. This makes it easier to understand mathematical relationships. The Desmos can be especially useful when teaching topics related to graphs, equations and functions because students can see the changes rather than just reading about them.

Demonstration on PhET Simulations

The next demonstration was given by Sunil Kumar on the PhET Simulations. We learned that simulations can be used to give students an opportunity to explore concepts on their own. Students can change different conditions, observe what happens and then connect their observations with the concepts they have studied. In this way, PhET bridges conceptual theory and empirical observation. Such activities can make the learning process more practical and encourage students to learn through exploration and experimentation.

Challenges and Limitations of Using AI

The final presentation was on "Challenges in Using AI", presented by Simarpreet, Jaskirat, Jessica Garg and Bhavnish. This presentation emphasized that although AI is becoming very useful in education, it also has certain limitations and challenges. AI cannot provide a solution to every problem and should not be blindly trusted. It was discussed that even AI could not solve the Riemann Hypothesis, which is a famous unsolved problem in mathematics.

The session emphasized that AI should serve as a supporting tool in education rather than a replacement for educators. Teachers maintain a vital role in explaining complex concepts, verifying information, diagnosing student difficulties, and providing essential guidance. A team of students including Reshma, Isha Chandel, Khushpreet kaur and Rhea photographed and prepared video clips of the whole event.

Concluding Remarks & Faculty Address

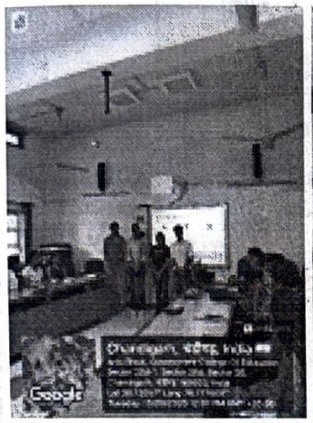
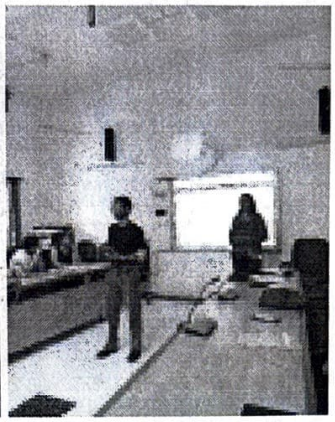
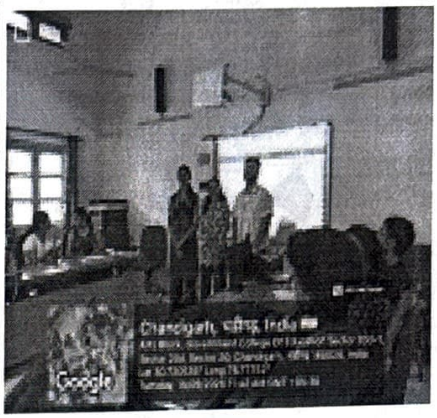
The workshop concluded with remarks from the subject in-charges, Dr. Nisha Singh and Dr. Upasana Thapliyal. They commended the prospective teachers for their well-prepared presentations and sincere efforts, which ensured the smooth execution of the program, and congratulated all students for their active participation.

In their address, the mentors emphasized that artificial intelligence should be viewed as a collaborative tool rather than a competitor. They highlighted how AI fosters inclusivity and enables creative, interactive learner centred classrooms. Specifically, they noted that digital tools can simplify abstract mathematical concepts by transforming them into accessible visuals. Emphasizing that AI is now an integral part of modern life, they urged future educators to master these technologies responsibly and effectively. Their encouraging words inspired participants to explore new digital resources and build confidence in technology-driven instruction. The principal, Dr Sapna Nanda appreciated efforts of the students and highlighted the need of collaborating AI in teaching to increase functionality and inclusivity in learner centred classrooms.

Overall, the workshop was a highly enriching experience that provided practical exposure to various AI tools. By exploring both the potential and the limitations of these tools, the participants successfully gained the technology-enabled pedagogical strategies needed to create interactive, learner-centered classrooms.

Report Compilation : Aakriti Sahore

Glimpses of the event:









Incharges

Dr Nisha Singh

Dr Upasana Thapliyal

Principal