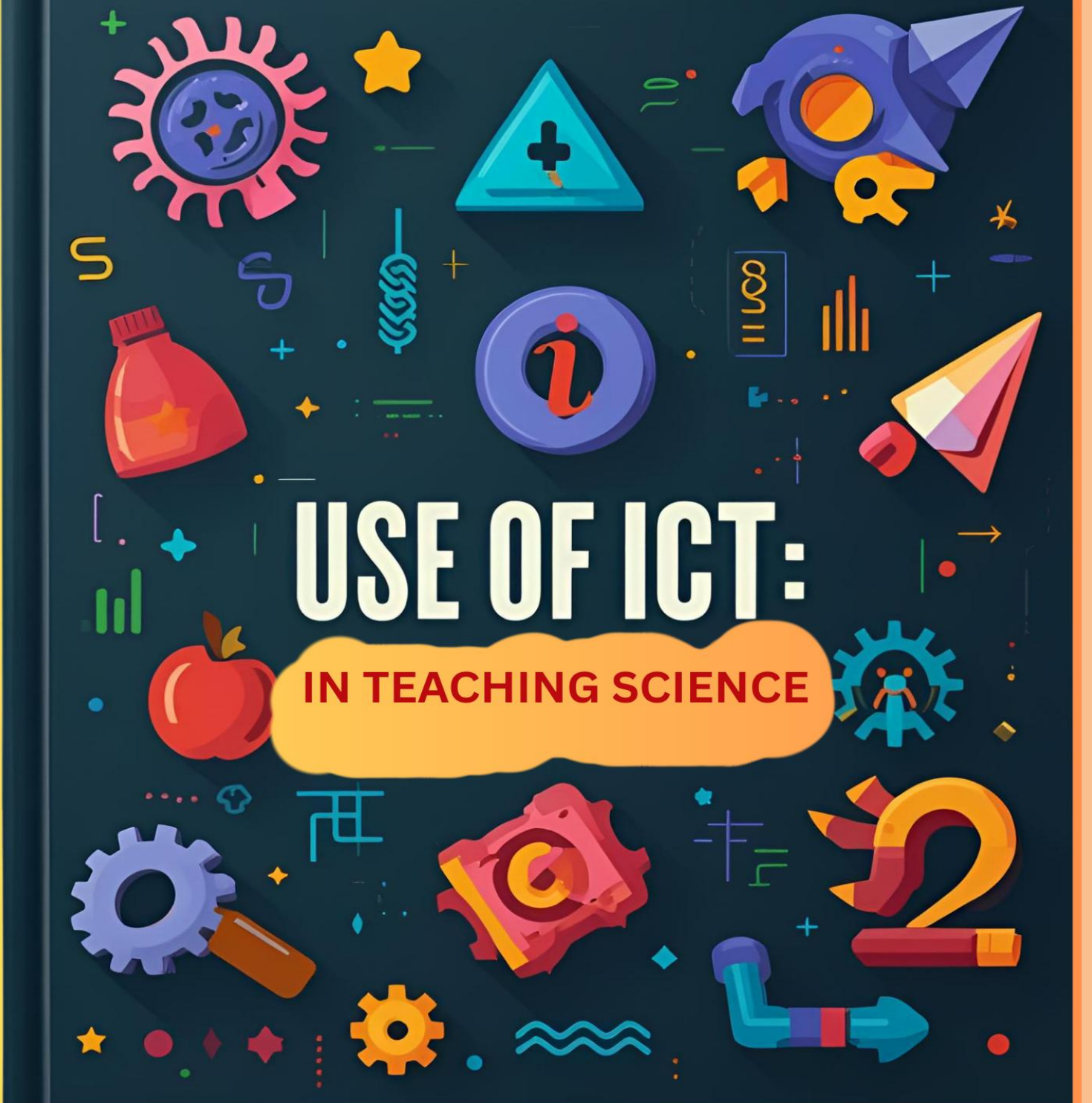




केन्द्रीय विद्यालय संगठन
आंचलिक शिक्षा एवं प्रशिक्षण संस्थान मैसूरु

KENDRIYA VIDYALAYA SANGATHAN

ZONAL INSTITUTE OF EDUCATION & TRAINING MYSURU



07.07.2025-11.07.2025

DIRECTOR MESSAGE

It is with great satisfaction and a deep sense of purpose that I extend my heartfelt appreciation to all participants, resource persons, and coordinators of the 5-Day Online Workshop on “Effective Use of ICT in Science Teaching”, conducted from 7th to 11th July 2025.

The digital revolution has redefined the landscape of education, and science classrooms are no exception. The workshop aimed to empower science educators with the competence to meaningfully integrate Information and Communication Technology (ICT) into their pedagogy—making teaching more interactive, experiential, and learner-centered. It is heartening to note that the sessions witnessed enthusiastic participation, reflective dialogue, and innovative thought exchange among educators from across the country. This e-Manual captures the essence of the workshop—its objectives, sessions, activities, best practices, and digital resources. It is designed to serve as a reference and toolkit for teachers as they continue to implement ICT-based strategies in their classrooms.

I am confident that the insights gained from this workshop will inspire a shift from traditional methods to more digitally empowered, inquiry-driven teaching-learning approaches, fostering a generation of scientifically curious, tech-savvy learners.

Let this be the beginning of a more connected, creative, and technology-integrated journey in science education.

With best wishes for your continued professional growth and excellence.

MS MENAXI JAIN
DIRECTOR ZIET MYSURU

**COURSE DIRECTOR
MS MENAXI JAIN
DIRECTOR ZIET MYSURU**

**ASSOCIATE COURSE DIRECTOR
MR MANPREET
PRINCIPAL
KV NEYVELI**

**RESOURCE PERASONS
MS USHMA TEOTIA
TGT(SCIENCE)
PM SHRI KV NO.1 JALAHALLI WEST**

**MS RENU DUBEY
TGT(SCIENCE)
KENDRIYA VIDYALAYA BOLARUM**

**COORDINATOR
DINESH KUMAR
TRAINING ASSOCIATE (PHYSICS)
ZIET MYSURU**

KVS ZONAL INSTITUTE OF EDUCATION & TRAINING MYSURU

5-DAY ONLINE WORKSHOP ON EFFECTIVE USE OF ICT IN SCIENCE TEACHING (07.07.2025-11.07.2025)

TIME TABLE

	09.00 - 10.00 am	10.00 -11.00 am	11.00 - 11.30 am	11.30 -12.30 pm	12.30 -1.30 pm
07.07.2025	EDUCATION AND TECHNOLOGY – THE SHIFT IN PERSPECTIVE.	TECHNOLOGY INTEGRATED EDUCATION AS PER NEP 2020	BREAK	ENHANCING HIGHER ORDER THINKING SKILLS WITH ICT	OBLIGATIONS OF DIGITAL CITIZENSHIP.
	ACD SIR	Ms. RENU		Ms. USHMA	DINESH
08.07.2025	INFRASTRUCTURE NEEDED FOR A TECH-INTEGRATED CLASSROOM	USEFUL ICT TOOLS FOR SCIENCE TEACHERS		USEFUL ICT TOOLS FOR TEACHERS	USE OF INTERACTIVE PANEL
	Ms. USHMA	Ms. RENU		Mr. SIBU JOHN	ACD SIR
09.07.2025	FLIPPED CLASSROOM USING ICT TOOLS	TASK-BASED LEARNING WITH TECHNOLOGY		3-MODEL VIRTUAL REALITY	DESIGNING A TECH-INTEGRATED LESSON
	Ms. USHMA	Ms. RENU		ACD SIR	Ms. USHMA
10.07.2025	ACTION PLAN FOR TECHNOLOGY INTEGRATED EDUCATION IN NCF 2023	USEFUL ICT TOOLS FOR ASSESSMENT AND FEEDBACK.		CYBER SECURITY IN CLASSROOM TRANSACTIONS.	LANGUAGE BARRIERS AND AGE-APPROPRIATENESS IN USE OF ICT IN CLASSROOMS.
	Ms. RENU	Mr. SIBU JOHN		Mr. D SREENIVASULU	Ms. RENU
11.07.2025	21ST CENTURY SKILLS FOR HOLISTIC DEVELOPMENT	ROLE OF ICT IN SCIENCE TEACHING		USE OF VIRTUAL LABS (O LAB)	USE OF AI TOOLS IN CLASSROOM TRANSACTIONS.
	Ms. USHMA	Ms. RENU		ACD SIR	Ms. USHMA

LIST OF PARTICIPANTS

LIST OF PARTICIPANTS				
S NO.	NAME OF TEACHER(MS/MR)	DESIGNATION	KV NAME	REGION
1	ANJALI	TGT (SCIENCE)	PM SHRI KV MEG & CENTRE	BENGALURU
2	B KAVITHA BHAT	TGT (SCIENCE)	PM SHRI KV NO.1. MANGALURU	BENGALURU
3	CHANDRA SHEKHAR UPADHYAY	TGT (SCIENCE)	PM SHRI KV MYSURU	BENGALURU
4	DEEPIKA MISHRA	TGT (SCIENCE)	PM SHRI KV ASC CENTRE, BENGALURU	BENGALURU
5	MENAKA DEVI R	TGT (SCIENCE)	KENDRIYA VIDYALAYA DRDO	BENGALURU
6	MUKTA KUMARI KHATNAWALIYA	TGT (SCIENCE)	PM SHRI KV MALLESWARAM (SHIFT-I), BENGALURU	BENGALURU
7	NEETA WAGE	TGT (SCIENCE)	PM SHRI KV HEBBAL	BENGALURU
8	POOJA YADAV	TGT (SCIENCE)	PM SHRI KV MALLESHWARAM SHIFT-2	BENGALURU
9	SHASHANK N RAO	TGT (SCIENCE)	PM SHRI KV NO.2 BELAGAVI CANTT.	BENGALURU
10	SNV HARINATH BABU	PGT PHYSICS	PM SHRI KV NO.2 AFS JALAHALLI EAST	BENGALURU
11	A.M SMITA	TGT (SCIENCE)	PM SHRI KV TIRUVANNAMALAI	CHENNAI
12	AAKANCHA SRIVASTAVA	TGT (SCIENCE)	PM SHRI KV NO.1 MADURAI	CHENNAI
13	BARATH P	TGT (SCIENCE)	KENDRIYA VIDYALAYA RTC ITBP ILLUPPAIKUDI	CHENNAI
14	BHAWNA RAJESH	TGT (SCIENCE)	PM SHRI KV NO 2 MADURAI	CHENNAI
15	C. VIMALA	TGT (SCIENCE)	PM SHRI KV AFS SULUR	CHENNAI
16	NEHA TIWARI	TGT (SCIENCE)	PM SHRI KV OCF AVADI CHENNAI	CHENNAI
17	PUJA RANI	TGT (SCIENCE)	PM SHRI KV NO. 2 AFS TAMBARAM	CHENNAI
18	SHILPA	TGT (SCIENCE)	KV NO.1(S-1), JIPMER CAMPUS, PONDICHERRY	CHENNAI
19	VASUNDHARA YADAV	TGT (SCIENCE)	PM SHRI KV AFS THANJAVUR	CHENNAI
20	YOGITA SHARMA	TGT (SCIENCE)	PM SHRI KV NO 1,A F.S., TAMBARAM	CHENNAI
21	ASHWATHY R	PGT PHYSICS	PM SHRI KV PATTOM (S-1)	ERNAKULAM
22	C RESISHMI	TGT (SCIENCE)	PM SHRI KV THRISSUR	ERNAKULAM
23	DEEPA K BHARATHAN	PGT BIOLOGY	KV NO1 CPCRI KASARAGOD	ERNAKULAM

24	MARIETTE P SEBASTIAN	PGT CHEMISTRY	PM SHRI KV RUBBER BOARD KOTTAYAM	ERNAKULAM
25	PRAMOD N T	PGT CHEMISTRY	PM SHRI KV IDUKKI	ERNAKULAM
26	RASEENA M	PGT CHEMISTRY	PM SHRI KV KALPETTA	ERNAKULAM
27	SAJI R	PGT PHYSICS	PM SHRI KV ADOOR SHIFT 1	ERNAKULAM
28	SHEEJA MENON	TGT (SCIENCE)	PM SHRI KV INS DRONACHARYA	ERNAKULAM
29	SIBU JOHN	PGT CHEMISTRY	PM SHRI KV KOLLAM	ERNAKULAM
30	SUBHADRA SANKAR	TGT (SCIENCE)	PM SHRI KV MALAPPURAM	ERNAKULAM
31	ANUPAMA GUDALA	TGT (SCIENCE)	PM SHRI KV GOLCONDA2	HYDERABAD
32	CHITRA LEKHA SHARMA	TGT (SCIENCE)	PM SHRI KV WARANGAL	HYDERABAD
33	K. VIJAY SRINIVAS	TGT (SCIENCE)	PM SHRI KV KAKINADA	HYDERABAD
34	MUPPURU RAJESHWARI	TGT (SCIENCE)	K V DRDO KANCHANBAGH, HYDERABAD	HYDERABAD
35	NIKITA SINGH	TGT (SCIENCE)	PM SHRI KV MALKAPURAM	HYDERABAD
36	RITANJALI NAYAK	TGT (SCIENCE)	PM SHRI KV NO 1 SRIVIJAY NAGAR, VISAKHAPATNAM	HYDERABAD
37	SHIVAM MISHRA	TGT (SCIENCE)	PM SHRI KV TIRUMALAGIRI	HYDERABAD
38	SHWETA SHARMA	TGT (SCIENCE)	PM SHRI KV KHAMMAM	HYDERABAD
39	VAIBHAV KUMAR KELWA	TGT (SCIENCE)	PM SHRI KV NO2, TIRUPATI	HYDERABAD

Report – Day 1

Course Title: Effective Use of ICT in Science Teaching

Date: 07/07/2025

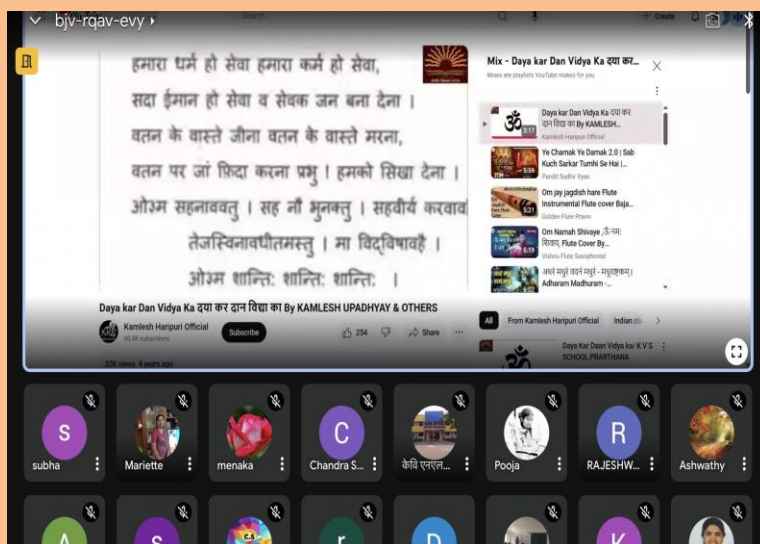
Inauguration and Introduction:

The first day of the training programme on Effective Use of ICT in Science Teaching began with the soulful KVS prayer, marking an auspicious start. The opening session was led by Shri Dinesh, TA Physics, who warmly welcomed all participants and set the tone for the week-long professional development program.

Shri Dinesh Kumar introduced the Associate Course Director, Shri Manpreet (Principal, KV NLC Nevyeli), and the Resource Persons – Ms. Renu Dubey (TGT

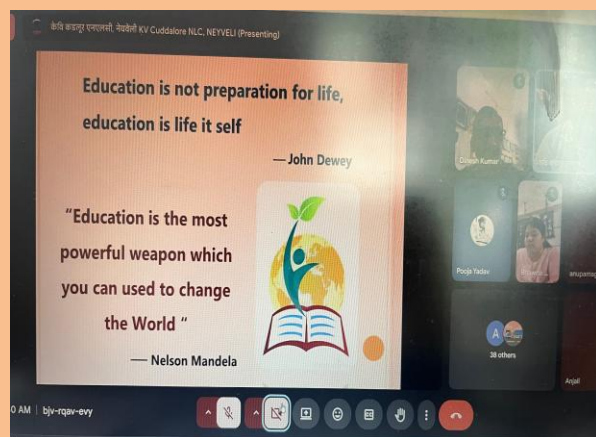
Science, KV Bolarum) and Ms. Ushma (TGT Science, KV No. 1 Jalahalli). All participants introduced themselves, promoting a collaborative and inclusive learning environment.

In his introductory address, Shri Dinesh threw light on the objectives of the course, which include equipping science teachers with effective ICT tools, enhancing digital pedagogical skills, and promoting learner-centric teaching approaches.



Session 1: Traditional to Technology-Enabled Learning

The first technical session was conducted by Shri Manpreet, focusing on the theme “Traditional to Technology-Enabled Learning.”



He began his session with a powerful story that illustrated the shift from rote memorization to experiential and child-centered learning. The story set the stage for deep reflection on how modern classrooms must evolve to meet the needs of 21st-century learners.

He discussed the evolution of classroom teaching from conventional methods to digital and blended models. Through various examples, he highlighted how technology can serve as a bridge between abstract concepts and real-world applications.

He further emphasized the importance of moving towards skill-based assessments rather than relying solely on content-based evaluations. The session aligned with contemporary educational policies and encouraged teachers to reimagine their teaching methodologies to enhance student engagement and understanding.

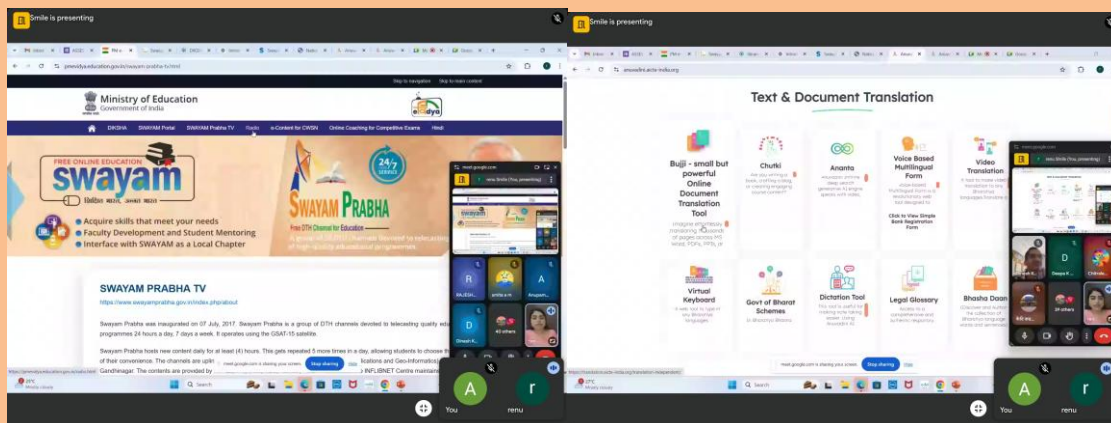
Session 2: NETF, NEP Chapters 23 & 24, and Digital Initiatives

After a short tea break at 11:00 AM, the next session was led by Ms. Renu Dubey, who delivered a comprehensive presentation on the National Educational Technology Forum (NETF). The session revolved around the integration of digital

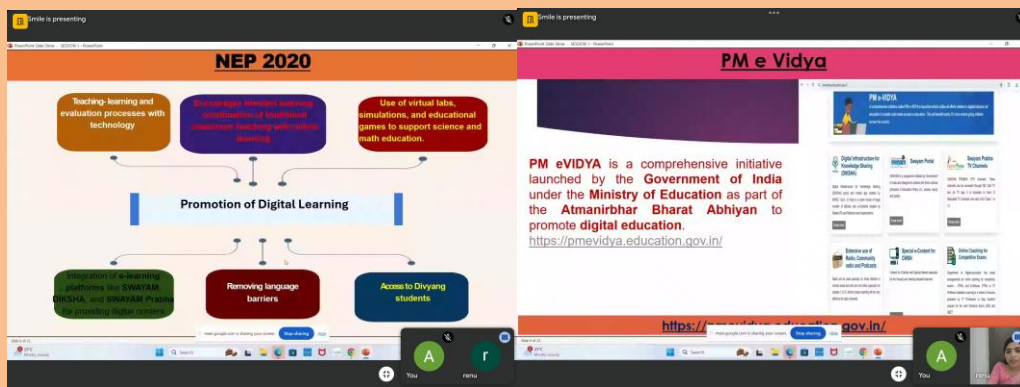
technology at all levels of education, as envisioned by the National Education Policy (NEP) 2020.

Key highlights of her session included:

- Introduction to SWAYAM and SWAYAM Prabha – platforms for online learning and educational content broadcasting.



Detailed insights into the PM eVidya initiative – an inclusive digital education platform supporting learners in remote and underserved regions. Explanation of NEP Chapters 23 and 24, which advocate for the use of technology for equitable and quality education.



Session 3: Enhancing Higher Order Thinking Skills using ICT and AI Tools

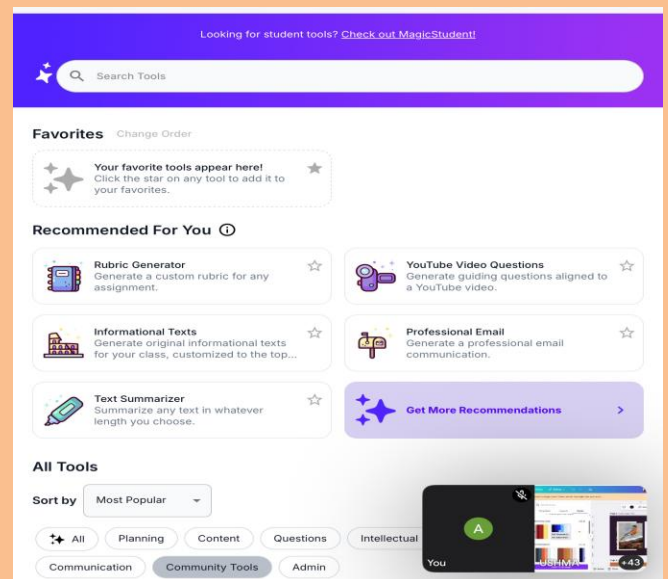
The final session of the day began at 12:40 PM and was facilitated by Ms. Ushma. The session, titled “Enhancing Higher Order Thinking Skills in Science using ICT and AI Tools,” aimed to encourage teachers to incorporate technology to foster critical thinking, creativity, and analytical skills.

She aligned her content with the NCF 2023, discussing its focus on competency-based and conceptual learning. The session included a hands-on activity using the AI platform – MagicSchool, where participants:

- Explored AI features for educators,
- Created rubrics and worksheets using the tool,
- Designed a virtual classroom for student engagement.

This practical experience helped participants understand how AI tools can be seamlessly integrated into everyday teaching to make learning more effective and personalized.

Assessments and Feedback:



At the end of each session, an assessment was conducted via Google Forms to reinforce learning and collect participant reflections. These real-time evaluations ensured active engagement and helped measure the effectiveness of each session.

Conclusion:

The first day of the course was highly enriching, informative, and interactive. It provided participants with valuable insights and practical tools to enhance science teaching through the use of ICT. The sessions were well-received, and the feedback was overwhelmingly positive.

Participants appreciated the clarity, relevance, and applicability of the topics discussed. The takeaways from the day were seen as immediately implementable, setting a strong and promising foundation for the rest of the training program.

DAY 2 (8/07/2025)

What's New x (167) WhatsApp x Meet - bjp-rqav-evy x Inbox (587) - raseenarajesh04 x Inbox (4) - hymatk1954@gmail x +

meet.google.com/bjp-rqav-evy

Idea Cellular - Cell... Login - KVS SAMAG...

Dinesh Kumar (Presenting)

YouTube

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2019 GROUP

केन्द्रीय विद्यालय संगठन

KV PRAYER

by

MUSIC TEACHERS AT ZIET MYSORE

Daya kar Dan Vidya Ka दया कर दान विद्या का By KAMLESH UPADHYAY & OTHERS

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Daya kar Dan Vidya Ka दया कर दान विद्या का By KAMLESH... Kamlesh Haripuri Official

Ye Chamak Ye Damak 2.0 | Sab Kuch Sarkar Tumhi Se Hai |... Paradi Sadhu Vrat

Om Jay jagdish hore Flute Instrumental Flute cover Raja... Golden Flute Project

Om Namah Shivaye ,ॐ नमो शिवाय Flute Cover By... Kishore Flute Sangeetham

ओर मधुर दान मधुर - मधुरकम्। Adharam Madharam...

From Kamlesh Haripuri Official Indian ci

Daya Kar Dan Vidya ka/ K V S SCHOOL, PRARTHANA

pramod nt

K. VIJAY SRINIVAS

NEHA TIWARI

Ashwathy R

Dinesh Kumar

shilpakadyan

38 others

Raseena M

9:06 AM | bjp-rqav-evy

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meet.google.com/bjp-rqav-evy

Idea Cellular - Cell... Login - KVS SAMAG...

pramod nt

K. VIJAY SRINIVAS

DEEPIKA MISHRA

Ashwathy R

Dinesh Kumar

shilpakadyan

Shivam Mishra

37 others

Raseena M

9:10 AM | bjp-rqav-evy

What's New x (166) WhatsApp x Meet - bjv-rqav-evy x Inbox (587) - raseenarajeesh04... x Inbox (4) - hymatk1954@gmail... x

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Idea Cellular - Cell... Login - KVS SAMAG...

USHMA TEOTIA (Presenting)

OBJECTIVES OF THIS SESSION

- UNDERSTAND CANVA AS AN ICT TOOL FOR SCIENCE.
- DISCOVER READY-TO-USE TEMPLATES.
- LEARN STEP-BY-STEP HOW TO DESIGN VISUALS.
- EXPLORE IDEAS FOR DAILY CLASSROOM USE.
- HANDS-ON PRACTICE.

9:26 AM | bjv-rqav-evy

Participants: USHMA TEOTIA, Dinesh Kumar, केवि एनएलसी नेयवेली..., Saji R, pramod nt, shilpakadyan, Ashwathy R, 36 others, Raseena M

What's New x (168) WhatsApp x Meet - bjv-rqav-evy x Inbox (587) x Inbox (4) - h... x Introducing... x AI in Educati... x align text or... x PHET: Free o... x

meet.google.com/bjv-rqav-evy

Idea Cellular - Cell... Login - KVS SAMAG...

renu Smile (Presenting)

PHET Interactive Simulations for Science and Math

Over 1.7 billion simulations delivered

PHYSICS MATH & STATISTICS CHEMISTRY EARTH & SPACE BIOLOGY

Teaching Resources

10:26 AM | bjv-rqav-evy

Participants: smita a m, renu Smile, 42 others, Raseena M

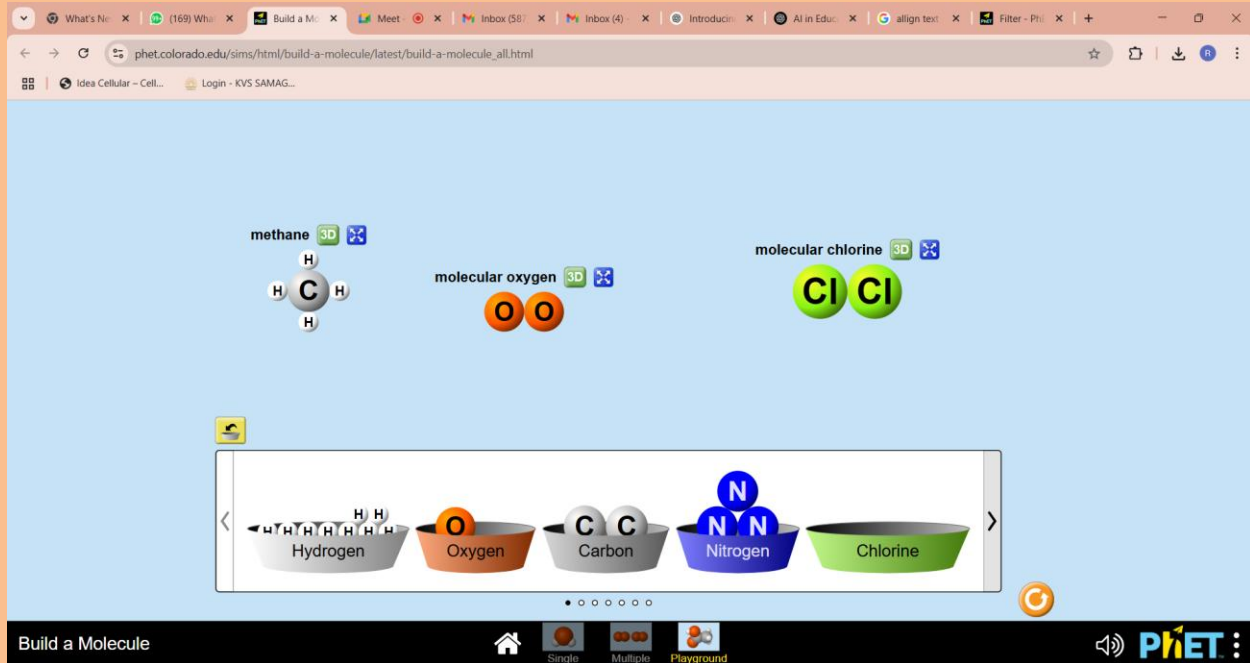
In-call messages

You can pin a message to make it visible for people who join later. When you leave the call, you won't be able to access this chat.

केवि एनएलसी नेयवेली तमिलनाडु KV NLC NEYVELI TAMILNADU 9:36 AM
<https://www.canva.com/education>

USHMA TEOTIA 10:04 AM
<https://docs.google.com/forms/d/1FAbQLSdz3yyhCyx0IEmyPuzNECfHLagQnmuvHfzcGqKhGGAmchzRPg/viewform?usp=sharing&source=103141738477264307469>

Send a message



meet.google.com/bjv-rqav-evy?authuser=0&pli=1

12:06 PM | bjv-rqav-evy

28°C Mostly cloudy

12:06 08-07-2025

Browser tabs: Inbox (1,089) - reshmic101, Meet - bjv-rqav-evy, You've already responded, Assessment exam Day 2(SES), Acid-Base Solutions

URL: meet.google.com/bjv-rqav-evy?authuser=0&pli=1

12:27 PM | bjv-rqav-evy

Participants (23 others):

- Pooja Yadav, Dinesh Kumar, केवि एनएलसी नेचरेली त..., Aakancha, Bhawna Rajesh, Puja Rani, SUBHADRA SANKAR, vasundhara yadav
- Nikita Singh, renu Smile, C.Vimala, Smita, Sheeja Menon, smita a m, Anjali Kuhar, Shivam Mishra
- Mariette Jiji, K. VIJAY SRINIVAS, Neeta Wagle, pramod nt, USHMA TEOTIA, ahashank rao, 23 others, Reshmi C

System tray: 28°C Mostly cloudy, 12:27 08-07-2025

4 / 31

WHAT IS CANVA?

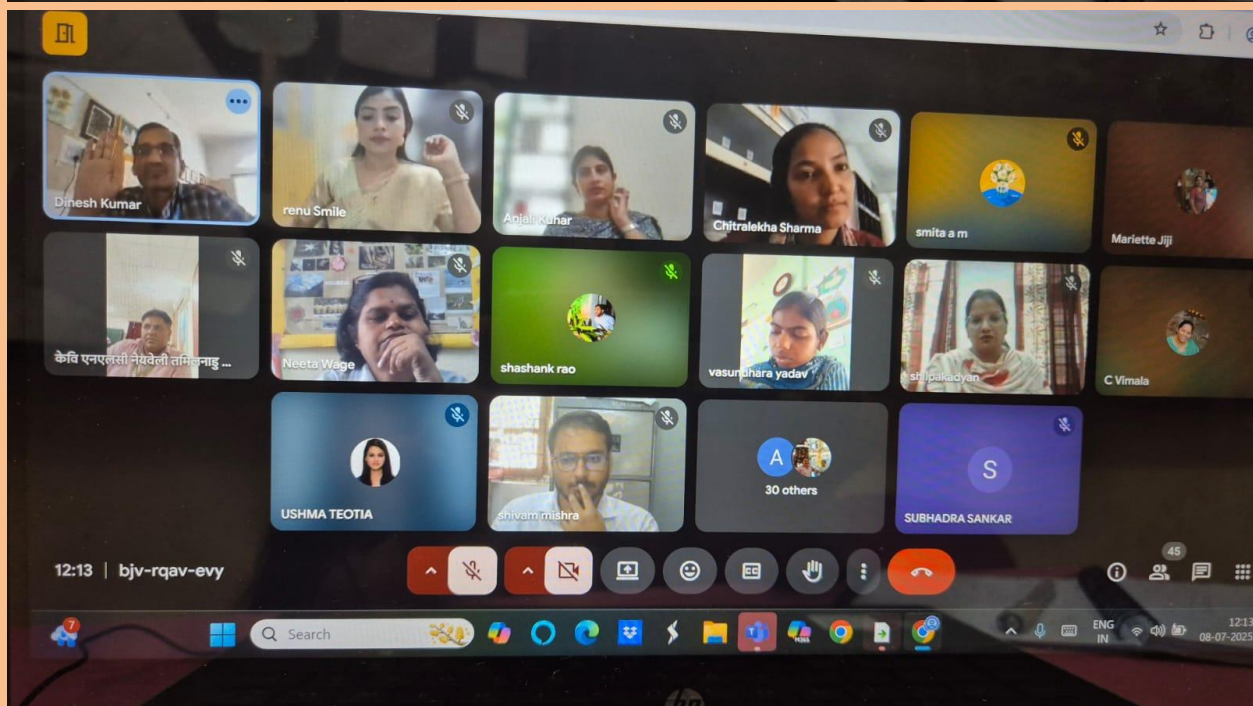
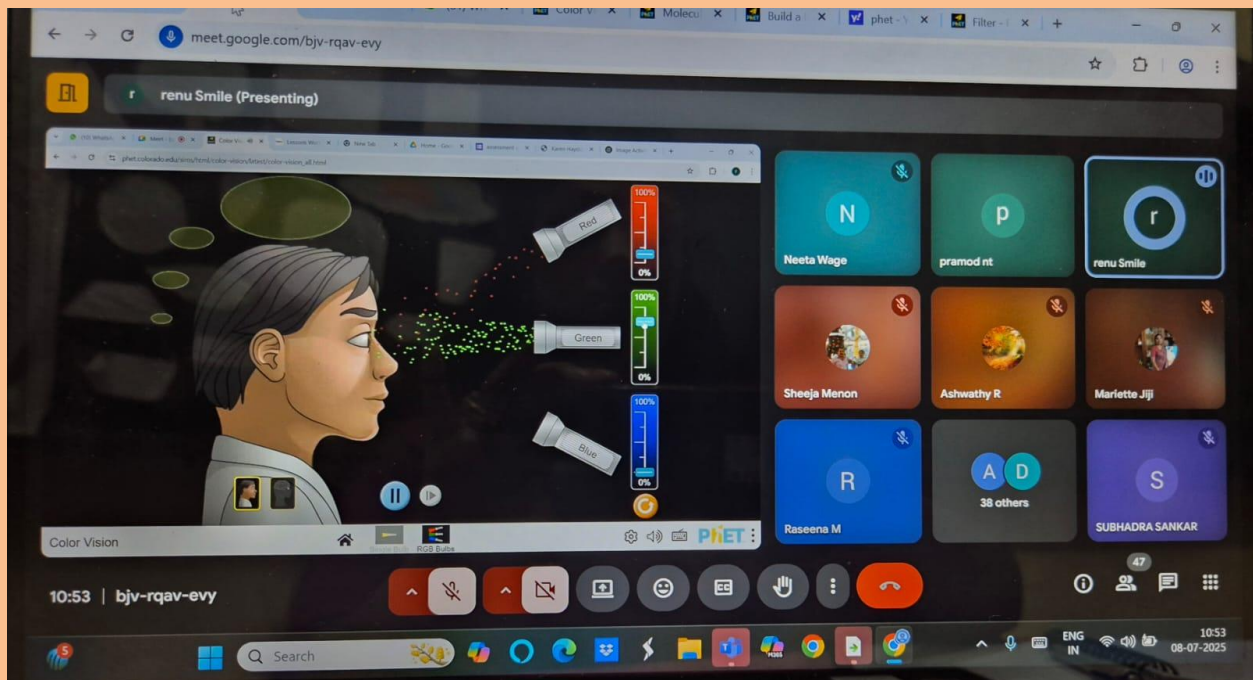
- FREE ONLINE GRAPHIC DESIGN PLATFORM.
- DRAG-AND-DROP EDITOR — VERY EASY TO USE.
- LIBRARY OF TEMPLATES: POSTERS, PRESENTATIONS, INFOGRAPHICS, VIDEOS, MIND MAPS.
- WORKS ON COMPUTER OR MOBILE.

Participants (33 others):

- USHMA TEOTIA, Dinesh Kumar, smita a m, Anjali Kuhar
- Chitralekha Sharma, Ashwathy R, NEHA TIWARI, Aakancha
- Deepta K Bharathan, DEEPIKA MISHRA, 33 others, SUBHADRA SANK...

2:30 | bjv-rqav-evy

System tray: Search, 09:30 08-07-2025



The introduction session of the online course “ICT in Science Teaching” was conducted by the Course Coordinator, Shri Dinesh Kumar sir with the objective of familiarizing participants with the goals, structure, and significance of integrating ICT tools in science education.

The session commenced with a warm welcome to all participants, followed by a brief prayer/invocation to set a positive tone. The Course Director then outlined the importance of ICT (Information and Communication Technology) in enhancing science teaching and learning, especially in today’s technology-driven educational landscape. Sir started the session with an interesting question “Why vibrations felt in the stomach while laughing? This is a thought-provoking question and it inter relate Biology and Physics.

Associate course director Shri Manpreet, Principal KV Neyveli Welcomed the participants and discussed the importance of Happiness and Interaction in the class room teaching learning.

CANVA

Summary of the Online Session on Introduction to Canva in Science Teaching

Date: 08/07/2025

Resource Person: Ms. Ushma Teotia TGT Science

Platform: Google meet

Organized as part of: Online Course on ICT in Science Teaching

An engaging online session was conducted on the topic “**Introduction to Canva for Science Teaching**”, aimed at equipping science educators with basic knowledge and skills to effectively use **Canva**—a free graphic design platform—for creating impactful teaching-learning resources.

The session began with a warm welcome and brief context on the **importance of visual tools** in science education. The resource person introduced **Canva** as a versatile tool that allows teachers to design **presentations, posters, infographics, worksheets, and videos** without requiring advanced design skills.

Key Takeaways:

- **Overview of Canva Interface:**
Participants were given a guided tour of Canva's dashboard, template categories, and drag-and-drop features.
- **Designing Science Materials:**
Live demonstrations included how to create:
 - Science concept posters
 - Infographics on scientific processes
 - Lesson presentations
 - Interactive classroom materials
- **Educational Templates:**
The facilitator showed how to search for education-specific templates and customize them for different science topics and grade levels.
- **Collaboration and Sharing:**
Instructions were given on how to collaborate with students and co-teachers, download designs in various formats, and share via Google Classroom or email.
- **Hands-on Practice:**
Participants were encouraged to try creating a sample science teaching poster during the session.

Conclusion:

The session was interactive, hands-on, and highly informative, sparking interest among teachers to incorporate creative visuals in their teaching. Canva was appreciated as a user-friendly, time-saving, and powerful ICT tool for enhancing student engagement and comprehension in science classrooms. Assessment Test was conducted.

PhET

Summary of the Session on PHET in Science Teaching

Online Course: ICT in Science Teaching

Platform: Google Meet

Date: 8/07/2025

Resource Person: Ms Renu Dubey TGT SCIENCE

As part of the online ICT integration training course organized by ZIET Mysore, a session on the effective use of PHET simulations in science teaching was conducted for KVS teachers. The session aimed at familiarizing educators with interactive simulation tools which are widely used to make abstract science concepts more concrete and engaging.

Key Highlights of the Session:

- **Introduction to PHET:**
The session began with an overview of the PHET Interactive Simulations platform, its background, and its educational significance.
- **Features and Accessibility:**
Teachers were guided on how to access simulations for Physics, Chemistry, Biology, and Mathematics, available freely online and offline.
- **Live Demonstration:**
The resource person demonstrated simulations such as:
 - Light – Image formation by convex and concave mirror
 - Building a molecule
 - Human Eye -Prediction of colour combination
 - Electrical circuit Making
- **Pedagogical Applications:**
The session emphasized how PHET can be used to:
 - Encourage inquiry-based learning
 - Support visual learning for abstract concepts
 - Facilitate virtual lab activities where physical labs are not available
- **Integration in Lesson Planning:**
Teachers were shown how to integrate PHET simulations into daily lesson plans, assignments, and formative assessments.

Outcome:

The session was interactive and insightful, enhancing participants' understanding of how PHET tools can make science teaching more interactive, visual, and

student-centered. Teachers expressed enthusiasm about incorporating PHET into their classrooms to promote deeper conceptual understanding and curiosity in learners. Assessment test was conducted

Digital Citizenship

Summary of the Session on Features of Digital Citizenship

Online Course: ICT in Science Teaching

Organized by: ZIET Mysore

Date: 8/07/2025

Platform: Google meet

Resource Person: Shri Dinesh Kumar

As part of the online training programme on ICT in Science Teaching organized by ZIET Mysore, an informative session was conducted on “Features of Digital Citizenship” to sensitize teachers about responsible and ethical use of digital tools and platforms in the teaching-learning process.

Objectives of the Session:

- To create awareness among teachers about the concept and importance of digital citizenship.
- To promote safe, ethical, and informed use of technology among teachers and students.
- To help integrate digital responsibility as part of ICT-based teaching.

Key Points Covered:

- Definition and Importance:
Digital citizenship was defined as the responsible use of technology by anyone who uses digital devices and online platforms.
- Nine Elements of Digital Citizenship:
The resource person explained the 9 key elements:
 1. Digital Access

2. Digital Commerce
 3. Digital Communication
 4. Digital Literacy
 5. Digital Etiquette
 6. Digital Law
 7. Digital Rights and Responsibilities
 8. **Digital Health and Wellness**
 9. **Digital Security (Self-Protection)**
- **Relevance in School Education:**

Emphasis was laid on how digital citizenship must be inculcated in students to prepare them for the digital world, especially with the increased use of online platforms in education.
 - **Cyber Safety and Ethics:**

Teachers were guided on topics like **cyberbullying**, **online privacy**, **plagiarism**, and promoting **respectful communication** online.
 - **Teacher's Role:**

The session stressed the role of teachers in modelling appropriate digital behaviour and integrating digital citizenship lessons in regular science teaching through project work, digital tools, and classroom discussions.

Conclusion:

The session was **insightful, timely, and highly relevant** in today's digital age. It helped teachers understand their role in **guiding students to become responsible digital citizens** and highlighted the need for ethical technology use in science education. Participants appreciated the clarity and practical tips provided by the resource person. Assessment test was conducted.

Interactive Panel in classroom Teaching learning process

Summary of the Session on Using Interactive Panel in Classroom Teaching

Course: ICT in Science Teaching

Organized by: ZIET Mysore

Participants: Science teachers

Date: 8/07/2025

Platform: Google meet

Resource Person: Shri Manpreet Principal K V Nyveli

As part of the online capacity-building programme on ICT in Science Teaching conducted by ZIET Mysore, an informative and hands-on session was organized on the topic "How to Use Interactive Panel in Classroom Teaching". The objective was to familiarize KVS teachers with the effective integration of interactive panels (smart boards) to enhance classroom engagement and digital pedagogy.

Key Highlights of the Session:

- **Introduction to Interactive Panels:**
The session began with an overview of interactive panels and their features, such as touch functionality, whiteboard tools, screen sharing, inbuilt apps, and connectivity options.
- **Demonstration of Tools and Features:**
The resource person demonstrated key classroom functions, including:
 - Writing and drawing using digital pens
 - Inserting images, videos, and diagrams
 - Saving class notes and annotations
 - Accessing internet resources and simulations
 - Splitting screen for collaborative activities
- **Integration with Teaching Aids:**
Teachers learned how to use the panel alongside PowerPoint presentations, PDFs, and educational tools such as PHET simulations, Google Slides, and videos from online platforms.
- **Interactive Teaching Strategies:**
Suggestions were given on how to use the panel to:
 - Promote student interaction and collaboration
 - Conduct real-time quizzes and polls
 - Annotate on digital textbooks and worksheets
 - Use visual demonstrations for complex science concepts
- **Troubleshooting and Maintenance Tips:**
Basic troubleshooting steps and best practices for the care and usage of interactive panels were shared.

Conclusion:

The session was practical, engaging, and empowering, enabling teachers to confidently use interactive panels as a dynamic tool for blended and interactive science teaching. Participants appreciated the clarity of the demonstrations and expressed readiness to adopt the panel effectively in their own classrooms.

REPORT ON DAY 2 (8/07/2025)OF THE ONLINE COURSE: ICT IN SCIENCE TEACHING

Organized by ZIET Mysuru

The second day of the ICT in Science Teaching course unfolded with a blend of energy, enthusiasm, and hands-on exploration of digital tools, aimed at empowering science teachers to make classroom learning more engaging and interactive.

A Thoughtful Beginning

The day started on a positive note with a prayer, creating a calm and reflective atmosphere. Participants were welcomed warmly, and a brief recap of the previous day helped set the tone. The agenda for the day was shared, building anticipation for the sessions ahead.

Designing with Canva

The first session introduced teachers to **Canva** a user-friendly graphic design tool by **Ms Ushma Teotia** ,Resource person. With live demonstrations, teachers explored how to:

- Create eye-catching science posters, worksheets, and presentations.
- Use pre-designed templates to save time.
- Make content visually appealing for students.

It was a fun and creative session that sparked a lot of interest and imagination among the participants.

Exploring Simulations through PhET

Next came an exciting dive into the world of **PhET simulations** by **Ms Renu Dubey** ,Resource person. Teachers were guided through the platform, discovering how interactive simulations can bring abstract science concepts to life. Whether it was simulating chemical reactions or visualising motion, the session showed how students can learn by doing — even virtually.

Becoming Responsible Digital Citizens

This session highlighted a vital aspect of teaching in the digital age — **Digital Citizenship** by Shri Dinesh Kumar , Course Director *ZIET Mysuru*

Discussions focused on:

- Staying safe online and protecting personal information.
- Respecting others in digital spaces.
- Encouraging students to use technology responsibly and ethically.

It was an eye-opener for many, reminding us that being digitally literate also means being digitally responsible.

Making the Most of Interactive Panels

The day concluded with a practical session on using **interactive panels** in the classroom .

by Shri Manpreet , Principal KV Neyveli

Teachers learned about:

- Key features of smart boards and digital whiteboards.
- How to use annotation tools and multimedia to enhance lessons.
- Engaging students through interactive content and live demonstrations.

This session empowered teachers to confidently integrate technology into everyday science lessons.

Conclusion

Day 2 was an inspiring journey filled with creative ideas and meaningful digital tools. Teachers not only gained confidence in using platforms like Canva and PhET but also reflected on their roles as digital role models. The hands-on approach and interactive sessions kept the momentum high and left everyone eager for more.

The course continues to provide valuable insights into how ICT can transform science classrooms into vibrant spaces for exploration and discovery.

Report on Day 3

ICT in Teaching Science Workshop

Date: 09-07-2025

The third day of the workshop on *ICT in Teaching Science* began at 9:00 AM with the KVS morning prayer, setting a positive and disciplined tone for the day.

After the prayer, the resource persons addressed the doubts and queries raised by participants regarding the previous day's sessions. The participants appreciated the way the resource persons patiently and effectively resolved their concerns, ensuring conceptual clarity.

Session 1: Flipped Classroom using ICT

The first session was conducted by Ms **Ushma Ma'am (TGT SCI.)**, who presented an insightful session on *Flipped Classroom using ICT*. She elaborated on how technology can be effectively integrated into flipped learning and also gave a detailed demonstration of the *School AI Portal*. The participants found the session highly practical and innovative.

Session 2: Task-Based Learning

The second session was taken by **Renu Ma'am (TGT-Sci.)**, who delivered a highly engaging session on *Task-Based Learning*. She introduced the participants to various ICT tools and portals like **Khaydock**, **Google AI Studio**, and **TED Ed**, explaining how these can be used to make learning more interactive and student-centric.

Demonstrations by Participants

After the second session, participants voluntarily came forward to demonstrate the concepts and tools they had learned so far during the workshop. Their enthusiasm and creativity reflected their keen interest and effective learning. **Mr. Saji R** demonstration activity on a ray of light passing through a rectangular glass slab.

Session 3: Creative Portals for Teaching

The third session, again led by Ms **Ushma Ma'am (TGT SCL.)**, introduced participants to a variety of interesting and creative online portals for teaching, such as **crosswordlabs.com** and **purposegames.com**. These platforms were appreciated for their ability to make teaching and learning more engaging through gamification and interactive content.

At the end of each session, an assessment was conducted to reinforce the learning objectives and ensure active participation.

Overall, the third day of the workshop was highly interactive, innovative, and productive. The hands-on approach and the opportunity for participants to showcase their learning made the sessions more meaningful and impactful.

We all thanks ZIET, Mysuru and KVS for giving us this opportunity to learn and come up with better and updated version of teaching.

9:09 AM | bjv-rqav-evy

USHMA TEOTIA (Presenting)

File

Resolve

Editing

Present

Share

Design

Elements

Text

Brand

Utilities

Tools

Projects

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000

Page 1 - Add page title

Present full screen

Presenter view

Autoplay

Present full screen at your own pace

Present

Page 2 - Add page title


Notes

Timer


35%

Pages 1/14

9:25 AM | bjv-rqav-evy

 USHMA TEOTIA (Presenting)

OBJECTIVES



- Understand what a flipped classroom is
- Connect with NEP 2020 & NCF 2023
- Explore SCHOOL.AI for flipped lessons
- Get practical ideas for science topics
- Plan an example flipped lesson
- Discuss challenges & solutions

USHMA TEOTIA

19 Ritanjali Nayak

Sheeja Menon

Dinesh Kumar

anupamag.13 tgt








Neeta Wage


KAVITHA BHAT B

36 others





YOGITA SHARMA


9:25 AM | bjv-rqav-evy






45




 USHMA TEOTIA (Presenting)

TRADITIONAL




lecture




homework activities

FLIPPED



lecture



classroom activities

USHMA TEOTIA

19 Ritanjali Nayak

Sheeja Menon

Dinesh Kumar

anupamag.13 tgt








Neeta Wage


smita a m

35 others





YOGITA SHARMA

9:27 AM | bjv-rqav-evy





44



schoolai

Products Solutions Resources Pricing Space code Sign In Demo

SchoolAI for... Teachers School Leaders Coaches Students Higher Ed Other

Empower every learner,
support every educator

A trusted AI platform loved by teachers and made to support every learner

Free for teachers

USHMA TEOTIA (Presenting)

USHMA TEOTIA

Ritanjali N...

Sibu John

केवि पन्तलसो ने...

Reshmi C

shilpakadyan

37 others

YOGITA SHARMA

9:33 AM | bjv-rqav-evy

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32°C Haze

Search

ENG IN

09:33 09-07-2025

schoolai

Launchpad Spaces Tools Assistants Community

Launch a Space

electricity

Started Jul 9, 2025, 9:42 AM

Invite Pause End

26 Participants

NAME	HEADLINE
A M SMITA	A M SMITA is just getting started.
Aakanksha	Aakanksha is just getting started.
Anjali	Minimal engagement; needs encouragement to elaborate.
Ashwathy	Ashwathy is just getting started.
BARATH P	Engaged in exploring charge movement concepts effectively.

NEETA WALE

Student believes resistance is directly proportional to the flow of charges, indicating a misunderstanding: resistance actually reduces the flow of charges (current).

CHANDRA BHEKHAR UPADHYAY

Student asked about the origin of Ohm's Law formula, showing curiosity about the reasoning and history behind key concepts rather than just memorizing equations.

BARATH P

Student understands that resistance limits the flow of charges, showing growing comprehension of how resistance functions in circuits.

Rasena

Student mentioned Ohm's law right away, showing awareness of key concepts in electricity and resistance.

USHMA TEOTIA

Mariette Jiji

Rasena M

S

shilpakadyan

Reshmi C

Puja Rani

37 others

YOGITA SHARMA

9:47 AM | bjv-rqav-evy

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🔊 🔇 📹 📷 🗑️ 🛑 ⋮ 📞

32°C Haze

Search

ENG IN

09:47 09-07-2025

renu Smile (Presenting)

Chat Prompt

Welcome to AI Studio

Explain the probability of rolling two dice and getting 7 →

What's new

URL context tool

Fetch information from web links

Native speech generation

Generates high-quality text to speech with Gemini

Live audio-to-audio dialog

Try Gemini's natural real-time dialog with audio and video inputs

Native image generation

Immersive text-to-image generation with the new Gemini 2.0 Flash

Run settings

Gemini 2.5 Pro

Token count 0 / 1,048,576

Temperature

Media Resolution Default

Thinking

Thinking mode

Set thinking budget

Tools

Structured output

Code execution

Function calling

Grounding with Google Search

10:34 AM | bjv-rqav-evy

47

47

SL - BAN
Game score

Search

ENG IN 10:34 09-07-2025

Dinesh Kumar

renu Smile

Reshmi C

Sheela Menon

Puja Rani

Chitralekha Sharma

Mariette Jiji

35 others

YOGITA SHARMA

11:18 AM | bjv-rqav-evy

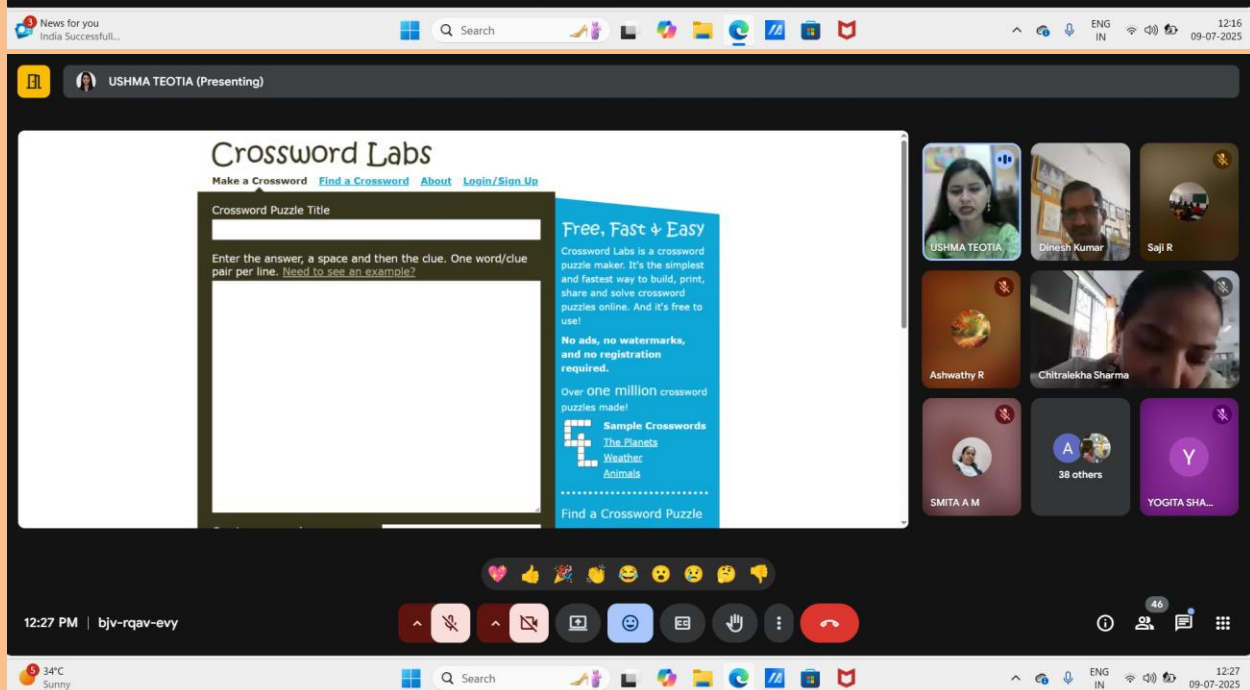
43

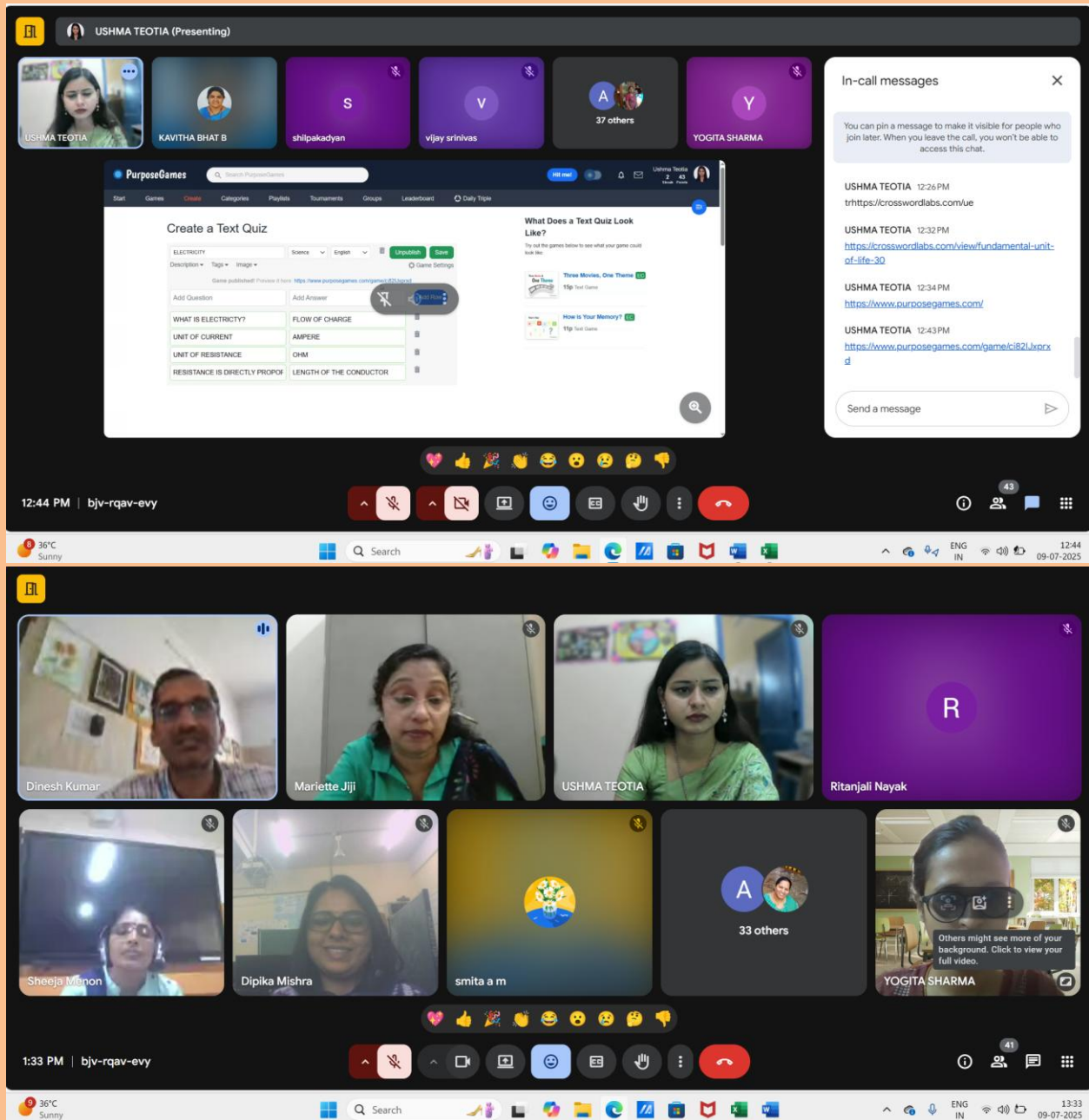
43

BAJFINANCE
+1.12%

Search

ENG IN 11:18 09-07-2025





- **Summary of Session 1- Flipped Classroom using ICT**

On the third day the first session was presented by Ushma Ma'am on the topic of Flipped Classroom using ICT. Her session included understanding flipped classroom, connection with NEP 2020 and NCF 2013, exploring School AI, practical ideas for science and pros and cons of flipped

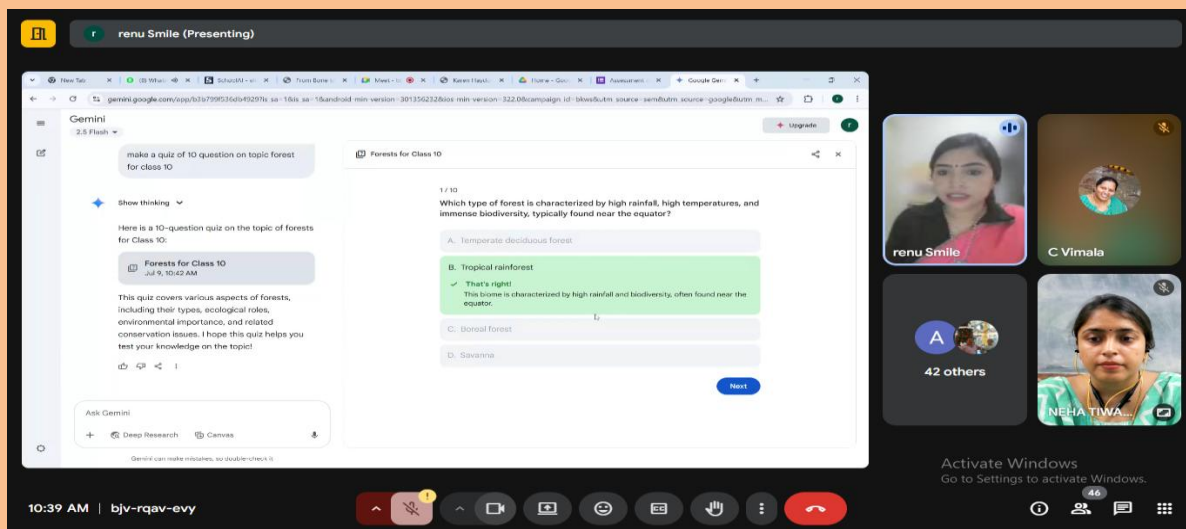
classroom. The presenter thoroughly discussed benefits, differences between traditional classroom and flipped classroom and challenges faced during flipped classroom. The session concluded with an assessment on the given topic.



- **Summary of Session 2- Role of technology in task based learning**

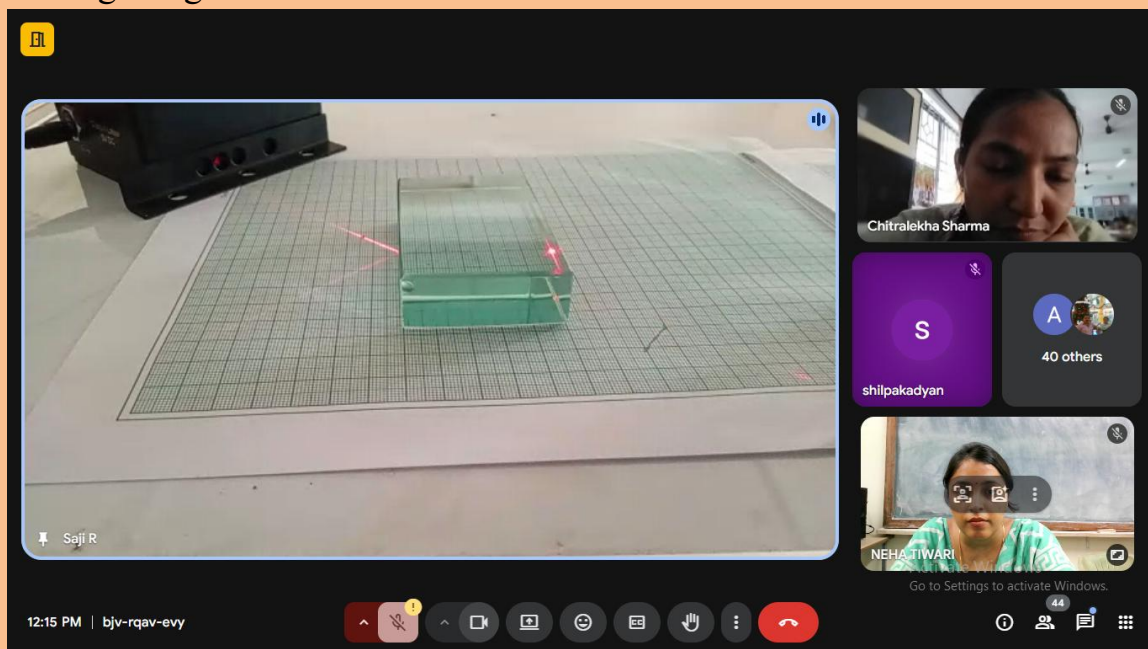
The second session was conducted by Renu Ma'am on the role of technology in task based learning. Use of various portals such as khaydok, Google AI studio, Gemini and TED-Ed was shown. Gemini to frame multiple choice questions from different science topics. Images available in Khaydok can be used to make learning more interactive. In TED-Ed, we got to know how we can create a lesson by framing questions from videos

available in the.



- **DEMONSTRATION OF ACTIVITY BY Mr. Saji R**

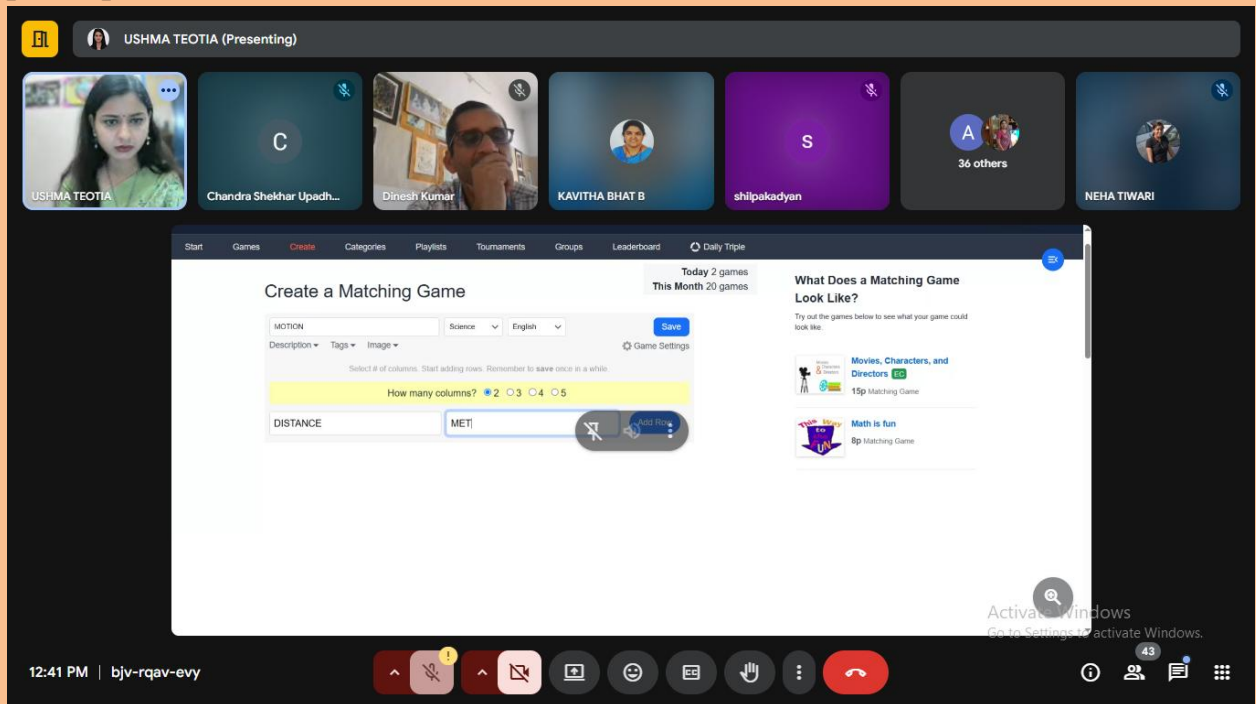
Mr. Saji R presented an activity on a ray of light passing through a rectangular glass slab.



- **Summary of Session 3- Importance of educational games**

The last session of day 3 was presented by Ushma Ma'am on the topic 'Importance of Educational Games'. During the session, we got to know of two portals: crosswordlabs and purposegames. All the participants made their own educational games based on different science topics using both the

portals. Assessment was based on educational games developed by the participants.



WhatsApp Meet - bjv-rqav-evy Inbox (3,395) - neha1995tiwari New Tab

meet.google.com/bjv-rqav-evy

USHMA TEOTIA (Presenting)

Crossword Labs

Make a Crossword Find a Crossword About Login/Sign Up

Crossword Puzzle Title

Enter the answer, a space and then the clue. One word/clue pair per line. [Need to see an example?](#)

Free, Fast & Easy

Crossword Labs is a crossword puzzle maker. It's the simplest and fastest way to build, print, share and solve crossword puzzles online. And it's free to use!

No ads, no watermarks, and no registration required.

Over one million crossword puzzles made!

Sample Crosswords

- The Planets
- Weather
- Animals

Find a Crossword Puzzle

USHMA TEOTIA

43 others

NEHA TIWA...

12:23 PM | bjv-rqav-evy

Activate Windows 46
Go to Settings to activate Windows.

Type here to search

Apple suffers another...

12:23 09-07-2025

USHMA TEOTIA

Ritanjali Nayak

Dinesh Kumar

Sheeja Menon

Dipika Mishra

C Vimala

Mariette Jiji

32 others

NEHA TIWARI

1:30 PM | bjv-rqav-evy

ICT Workshop Report Day 4 : Technology Integration in Education

The workshop began with a prayer and an engaging activity led by Dinesh Sir, focusing on prioritizing tasks in a busy schedule. The sessions that followed were informative and interactive, covering various aspects of technology integration in education.

Session 1: Technology Integrated Education in NCFSE

Timings- 9:00 a.m to 10:15 a.m

Madam Renu Dubey led the first session, discussing the importance of technology in education. The discussion centered around whether digital infrastructure or hiring quality teachers is more crucial. The session encouraged teachers to share their opinions, fostering a collaborative learning environment. Additionally, Mam introduced platforms like DIKSHA and SWAYAM for capacity building and demonstrated the use of the Multimetre app for polling.

Session 2: Effective Use of AI and Prompt Engineering

Timings- 10:15 a.m to 11:30 a.m

Sibu Sir's session was enlightening, focusing on the effective use of Artificial Intelligence (AI) in education. He introduced the concept of "prompts" and emphasized the importance of clear and refined instructions to achieve desired outputs from AI tools. The session also covered the development of an Android app using HTML, CSS, and Java, showcasing the potential of technology in education.

After this we had a LUNCH BREAK from 11:30 a.m to 12:00 p.m.

Session 3: 3D Virtual Tools for Teaching

Timings- 12:00 p.m to 1:00 p.m

ACD Shri Manpreet Sir led the third session, exploring 3D virtual tools for teaching. He introduced tools like Sketchfab for generating 3D images, DIKSHA portal, Blender, Turbosquad, and Zoom It Portable. The session was informative

and thought-provoking, highlighting the potential of these tools in enhancing student engagement and understanding.

Session 4: Language Barriers in ICT Tools

Timings- 1:00 p.m to 2:00 p.m.

The final session was taken by Renu Mam, focused on the challenges posed by language barriers in the use of ICT tools. The discussion centered around the difficulties students face due to language barriers and potential strategies to overcome these challenges. The session encouraged participants to share their views and experiences, promoting a deeper understanding of the issue.

The 4th day of workshop concluded with a sense of accomplishment and newfound knowledge, equipping participants with the skills and confidence to integrate technology effectively into their teaching practices.

Use of ICT in Science Teaching

Organized by ZIET Mysuru

Date: 7th July – 11th July 2025

Venue: Zonal Institute of Education and Training (ZIET), Mysuru

Organized by: Kendriya Vidyalaya Sangathan

Workshop Highlights – Day 5 (11th July 2025)

The concluding day commenced with the KVS prayer, setting a spiritual and enthusiastic tone for the sessions.

Welcome Address

-Mr. Dinesh extended a warm welcome to all participants and dignitaries with his encouraging words.

-Mr. Manpreet Singh, Principal, KV Neyveli, Chennai, addressed the gathering and shared thought-provoking insights on the evolving role of ICT in transforming science education.

Technical Sessions

Session on AI Tool – Gemini

Resource Person: Mr. Siby John

Mr. Siby John conducted a highly interactive and enriching session on application development using the Artificial Intelligence tool ‘Gemini’. Participants enthusiastically engaged in the hands-on activities, exploring how AI can be seamlessly integrated into science education.

Building 21st Century Skills in Science Classrooms

Resource Person: Ms. Usma Teotia, TGT Science, KV No.1 Jalahalli, Bengaluru Region

This session focused on fostering critical 21st-century skills such as problem-solving, collaboration, creativity, and digital literacy. Ms. Teotia’s delivery was clear and effective, making the session highly impactful and engaging.

Role of ICT Tools for Science Teachers

Resource Person: Ms. Renu Dubey, TGT Science, KV Bolarum

Ms. Dubey demonstrated the use of the PhET simulation tool and the AI-powered Alayna tool. She guided participants in creating instructional slides using Alayna and explored its various educational features. The session was hands-on, and participants found it very practical and insightful.

Virtual Lab & E-Content Development

Resource Person: Mr. Manpreet Singh

Mr. Manpreet introduced participants to DIKSHA portal and O-Labs, emphasizing their application in virtual experiments and content development. The demonstration showcased the power of these platforms in supplementing classroom learning.

Creative Digital Content with Adobe Express

Guest Speaker: Ms. Pooja, KV Wellington

Ms. Pooja's session on Adobe Express guided participants on creating visual content, such as posters and educational graphics. Her presentation was practical and inspiring, enhancing teachers' creative capacities.

Assessment and Feedback

A summative assessment was conducted to evaluate the knowledge and skills acquired during the workshop. Participants demonstrated a high level of understanding and application.

All the participants shared their reflections and feedback, expressing deep appreciation for the sessions and resource persons.

Valedictory Session

The workshop concluded with a blessing and address by Hon'ble DC and Director Ziet Mysuru Mrs. Minakshi Jain, who congratulated the participants and applauded the ZIET Mysuru team for the successful execution of the program.

After one participants from each region shared their impression on successful completion of workshop.

A formal vote of thanks marked the end of the five-day workshop, acknowledging the efforts of all coordinators, resource persons, and participants.

Conclusion

The five-day workshop on the Use of ICT in Science Teaching was a resounding success. Participants left with enriched knowledge, practical skills, and renewed enthusiasm to integrate ICT in their classrooms. ZIET Mysuru continues to play a pivotal role in empowering educators and driving innovation in teaching practices.

WhatsApp Meet - bju-rqav-evy

meet.google.com/bju-rqav-evy?pli=1&authuser=1

Dinesh Kumar (Presenting)

YouTube

असतो मा सद्गमय
तमसो मा ज्योतिर्गमय
मृत्योर्मा अमृतं गमय

Daya kar Dan Vidya Ka दया कर दान विद्या का By KAMLESH UPADHYAY & OTHERS

Kamlesh Haripuri Official

32K views 4 years ago

Mix - Daya kar Dan Vidya Ka दया कर दान विद्या का By KAMLESH...

Daya kar Dan Vidya Ka दया कर दान विद्या का By KAMLESH...

Daya Kar Daan Vidya ka K V S SCHOOL PRABHATHANA

BHARAT KA SWARNIM GAURAV || kvs song || LM Arya

Kendriya Vidyalaya Prayer

वृद्ध शक्ति हरे दे दामिनि | Latest Hindi Song 2018 | MOV...

KVS PRAYER - DAYA KAR DAAN VIDYA KA

9:02 AM | bju-rqav-evy

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WhatsApp Meet - bju-rqav-evy

meet.google.com/bju-rqav-evy?pli=1&authuser=1

Ritanjali Nayak

Dinesh Kumar

Mariette Jiji

pramod nt

vijay srinivas

shilpakadyan

Pooja Yadav

34 others

Shivam Mishra

9:06 AM | bju-rqav-evy

Windows taskbar: File Explorer, Edge, Chrome, WhatsApp, etc.

Browser tabs: WhatsApp, Meet - b/v-rqav-evy, New Tab, New Tab, Google Gemini

Address bar: meet.google.com/bjv-rqav-evy?pli=1&authuser=1

Meeting title: USHMA TEOTIA (Presenting)

Slide content: Two blue speech bubbles, each containing a black silhouette of a couple. Below the speech bubbles is a horizontal row of 12 white exclamation marks on a yellow background.

Participants (grid):

- USHMA TEOTIA
- vijay srinivas
- Chitralekha Sharma
- RAJESHWARI M
- Pooja Yadav
- Neeta Wage
- Dinesh Kumar
- 37 others
- Shivam Mishra

9:57 AM | bjv-rqav-evy

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Address bar: meet.google.com/bjv-rqav-evy?pli=1&authuser=1

Participants (grid):

- KENDRIZADYALAYA SANGATHAN, ZIET
- Dinesh Kumar
- pramod nt
- renu Smile
- 37 others
- Shivam Mishra
- ushpakadyan
- USHMA TEOTIA
- 37 others

2:07 PM | bjv-rqav-evy

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SSSSSSMeet.google.com/b/v-rqav-evy?pli=1&authuser=1 - Google Search

ROLE OF ICT TOOLS FOR SCIENCE TEACHERS

Alayna

ROLE OF ICT TOOLS FOR SCIENCE TEACHERS

July 10, 2025

Click to add speaker notes

10:57 AM | b/v-rqav-evy

Participants: rani Smile, C Vimala, Dinesh Kumar, shilpakadyan, Nikita Singh, Reshmi C, USHMA TEOTIA, 40 others, Shivam Mishra

WhatsApp Meet - b/v-rqav-evy New Tab

meet.google.com/b/v-rqav-evy?pli=1&authuser=1

Sibu John (Presenting)

Gemini 2.5 Flash

HTML Structure:

- A `div` acts as the main container, styled with Tailwind CSS for a clean, card-like appearance.
- Control buttons (Pen, Eraser, Clear Board), a color input (`type="color"`), and a range slider (`type="range"`) are provided for user interaction.
- A `<canvas>` element is the drawing surface.

CSS (with Tailwind CSS):

- Responsive Design: Tailwind's utility classes (`flex` , `justify-center` , ...)

Interactive Drawing Board

Pen Eraser Ink Color Size Clear Board

Ask Gemini

Deep Research Canvas

Gemini can make mistakes, so double-check it.

9:24 AM | b/v-rqav-evy

Participants: Sibu John, pramod nt, Dinesh Kumar, Mariette Jiji, Ritanjali Nayak, shilpakadyan, Pooja Yadav, 37 others, Shivam M.

