



Children Welfare Centre

# Clara's College of Education

**AFFILIATED TO UNIVERSITY OF MUMBAI**

organises a

**ONE-DAY NATIONAL CONFERENCE**

on

**“Fostering Digital Literacy For  
Preparing Innovative Teaching Learning  
Environment ”**

29th November, 2024

10 am onwards

## VENUE

CWC Clara's College of Education, Yari Road, Versova,  
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**Children Welfare Centre  
Clara's College of Education,  
Affiliated to Mumbai University  
Versova, Yari Road Andheri (W) Mumbai-400061  
Academic Year – 2023- 2025**

## **Report on the Conference on "Fostering Digital Literacy for Preparing Innovative Teaching-Learning Environment"**

**Held at Clara's College of Education -Date: 29/11/2024**

### **Introduction**

A conference on "Fostering Digital Literacy for Preparing Innovative Teaching-Learning Environment" was organized at Clara's College of Education on 29th of November, 2024. The conference aimed to bring together educators, researchers, and experts to discuss the crucial role of digital literacy in enhancing teaching and learning processes. As the educational landscape rapidly evolves with digital tools, the conference sought to explore innovative methods to integrate digital literacy into the curriculum and how it can create dynamic, interactive, and effective teaching-learning environments.

### **Objectives of the Conference**

**The main objectives of the conference were:**

- To create an awareness and dialogue between Professionals, Academicians and Research Scholars.
- To create awareness among teachers about major issues related to Digitalization in Education.
- Building a culture of innovation amongst teachers in a new normal.

## **Inaugural Session**

The conference began with Welcome speech of Prin. Dr.Ratnaprabha Rajmane. An inaugural speech by Dr.Sunita Magre, head of the Education Department University of Mumbai, who is an expert in educational technology. She emphasized the growing significance of digital literacy in today's world and how its integration into classrooms is no longer optional but essential for students' academic and professional growth. The keynote speaker also set the tone for the discussions, highlighting the importance of preparing future educators to navigate and leverage digital tools effectively.

## **Keynote Speakers and Panel Discussions**

### **1. Keynote Address 1:"Importance of Design Thinking for Innovation in Education" Delivered by Mr. Aditya Rajmane, an expert in digital learning tools.**

The address provided a comprehensive overview of digital literacy and how it empowers both teachers and students. It focused on the skills required to use digital tools effectively, the importance of critical thinking, and how technology can be used to foster an engaging and student-centered learning environment.

This session discussed various digital tools and platforms that have transformed the teaching-learning process, including Learning Management Systems (LMS), interactive whiteboards, educational apps, and virtual classrooms.

Panelists shared their experiences using these tools and gave practical examples of how they have enhanced student engagement and knowledge retention.

### **2. Keynote Address 2: "Enhancing Academic Achievement: Integrating STEM Technology in Physics Education for Secondary Level Students in CBSE Schools"**

Delivered by Ms. Sanchita Ashok Jadhav an Doctoral Research Scholar at Centre for Educational Technology, IIT BOMBAY.

The session addressed the challenges of adopting digital literacy in classrooms, such as infrastructural limitations, the digital divide, teacher preparedness and resistance to change. It also explored the opportunities for innovation, creativity, and personalized learning in a digitally empowered environment.

This session focused on the role of teacher training in equipping educators with the necessary skills to navigate the digital world.

Strategies for professional development, including workshops, training programs, and continuous learning, were discussed. The importance of digital fluency for teachers, not only in using digital tools but also in integrating them pedagogically, was highlighted.

### **3. Keynote Address 3: "Use of Artificial Intelligence Tools in Teaching"**

The third keynote address of the conference, titled "Use of Artificial Intelligence Tools in Teaching," was delivered by Dr. Sandhya Milind Khedekar, a distinguished expert in educational technology and AI integration. This session focused on the growing influence of Artificial Intelligence (AI) in education and its transformative potential in the teaching-learning process. The address explored how AI tools can be effectively integrated into the classroom to enhance learning outcomes, improve teacher efficiency, and personalize educational experiences for students.

#### **Understanding Artificial Intelligence in Education**

The keynote speaker began by providing a foundational understanding of AI, explaining its key components, such as machine learning, natural language processing, and data analytics.

AI was described as a technology capable of simulating human intelligence processes, which can enhance various aspects of teaching and learning. This includes automating administrative tasks, providing personalized learning experiences, and assisting with data-driven decision-making.

#### **Applications of AI Tools in the Classroom:-**

The speaker presented several AI tools that are currently being used to revolutionize the educational landscape. Key examples include.

**Adaptive Learning Systems:** AI-powered platforms that adjust the difficulty level and learning pace based on students' individual needs, ensuring personalized learning experiences

Intelligent Tutoring Systems (ITS): These systems mimic human tutors and provide instant feedback to students on their work, helping to reinforce learning outside of traditional classroom hours.

AI Chat bots: Chat bots can assist students with frequently asked questions, administrative tasks, and even provide tutoring support in specific subjects, allowing teachers to focus more on in-depth teaching.

**Automated Grading and Assessment Tools:** AI-based grading systems can grade assignments and quizzes in real-time, offering immediate feedback to students and relieving teachers from time-consuming grading tasks.

### **Enhancing Teacher Efficiency with AI**

The speaker emphasized how AI tools can help teachers reduce administrative burden, such as grading assignments, tracking student progress, and managing class activities.

AI can automate routine tasks, allowing teachers more time to focus on lesson planning, student engagement, and personalized teaching methods. Additionally, data analytics can be used to identify trends in student performance and provide insights into areas where individual students may need additional support.

Personalized Learning with AI. One of the most significant benefits of AI in education is the ability to offer personalized learning experiences. AI tools can analyze student data, such as past performance and learning behavior, to suggest customized learning paths.

The speaker pointed out that personalized learning can be particularly accommodating different learning styles, allowing students to progress at their own pace and targeted sources to support their individual learning needs. At Curriculum Development.

The keynote speaker also discussed how AI can assist in curriculum design. By analyzing data on student outcomes and learning preferences, AI tools can help educators create more affective and engaging curricula that align with student needs.

AI can also predict future learning trends and suggest changes to the curriculum that may better prepare for emerging fields and job markets

### **Challenges and Ethical Considerations:-**

While AI offers significant advantages, the speaker also highlighted some challenges and ethical concerns regarding its use in education. These include:

**Data Privacy:** With All systems collecting vast amounts of data on students, ensuring data privacy and protecting sensitive information is a major concern

**Bias and Fairness:** AI systems may unintentionally reflect biases present in the data they are trained on, potentially leading to unfair treatment of certain student groups.

**Teacher Training:** Teachers must be adequately trained to use AI tools effectively and ensure that they complete, rather than replace, traditional teaching methods.

### **The Future of AT in Education**

The speaker concluded by discussing the future possibilities of AI in education, including the development of more sophisticated AI tools that can provide even deeper insights into student learning behaviors. The potential of AI to create fully automated classrooms and more immersive learning experiences using augmented reality (AR) and virtual reality (VR) was also explored & keynote Address 4: "Utilization of Modern Technology for a Education"

The fourth keynote address of the conference, titled "Volatilization of Modern Technology for Inclusive Education, was delivered by Dr.J.Sujatharnation a owned expert in educational technology and inclusive education. The address focused on the role of modern technology in festering inclusive education, emphasizing how digital tools and innovations can help create an equitable environment for all students, including those with diverse needs and abilities. The speaker highlighted various technological solutions that can be leveraged to support students with disabilities, learning difficulties, and other challenges

### **Key Points Discussed:-**

#### **Understanding Inclusive Education**

The speaker began by explaining the concept of inclusive education, which is based on the principle that all students, regardless of their abilities or disabilities, should live access to quality education in a common learning environment

Inclusive education is about embracing diversity, ensuring that each student's unique learning needs are met, and promoting social, emotional, and academic success for all learners.

#### **4. Role of Technology in Inclusive Education**

The keynote speaker emphasized how modern technology plays a crucial role in breaking down barriers to learning and creating an inclusive environment.

Technology can provide individualized support, enhance communication, and offer alternative ways to engage with learning content. By addressing the specific needs of diverse learners. Technology fosters a more inclusive and accessible educational experience. Technological Tools for Supporting Students with Disabilities.

The speaker outlined several modern technological tools that can be used to support students with various disabilities. Assistive Technology (AT): Devices and software that help students with physical, sensory, or cognitive disabilities access the curriculum. Examples include screen readers, speech-to-text software, and hearing aids,

Augmentative and Alternative Communication (AAC) Devices. For students with speech or communication impairments, AAC devices (eg, communication boards, eye-tracking systems, and speech-generating devices) provide alternative ways to express themselves Text-to-Speech (TTS) and Speech-to-Text (STT) These tools help students with reading and writing difficulties by converting text into speech and vice versa. This supports students with dyslexia or other learning challenges, Closed Captioning and Subtitles: For students with hearing impairments, captions or subtitles in videos provide accessibility, ensuring that students can engage with multimedia content.

Learning Management Systems (LMS) and Adaptive. Learning Platforms. These platforms can be personalized to meet the learning needs of students, allowing for flexible pacing, content adjustment, and real-time feedback.

**5. Enhancing Social Inclusion through Technology** In addition to academic support, modern technology plays a vital role in promoting social inclusion by encouraging collaboration, communication, and peer interaction among students of different abilities.

Tools like collaborative online platforms, virtual classrooms, and social media can help students with disabilities connect with their peers, share experiences, and participate in group activities.

The speaker emphasized the importance of fostering an environment where all students feel valued and included, and how technology can bridge the gap in social interactions, **Overcoming Challenges in Implementing Technology for Inclusion**

While technology has immense potential, the keynote speaker also discussed the challenges faced by educators and institutions in implementing these tools effectively: **Access to Technology:** Not all students have equal access to digital devices, high-speed internet, or assistive technologies; the digital divide can exacerbate inequalities in education.

**Teacher Training** Educators need appropriate training and professional development to use technology effectively in inclusive classrooms. Many teachers may lack the confidence or expertise to integrate digital tools in a meaningful way. **Cost of Technology:** High-quality assistive technology and specialized learning tools can be expensive, which may limit their availability in schools, especially in underfunded regions, **The Future of Inclusive Education through Technology**

The keynote speaker concluded by discussing the future potential of technology in creating fully inclusive classrooms. Emerging technologies such as Artificial Intelligence (AI), Virtual Reality (VR), and Augmented Reality (AR) were highlighted as tools with the potential to further transform inclusive education. AI-powered learning systems can adapt in real-time to meet the needs of students, while VR and AR can provide immersive experiences for students with special needs, offering sensory and experiential learning opportunities

The importance of continued research and development in the field of educational technology was emphasized, with a call for educators, policymakers, and tech developers to collaborate in creating inclusiveness. Accessible, and innovative learning environments.

## **6. Paper Presentation**

A paper presentation on the various sub-themes of "Fostering Digital Literacy for Preparing Innovative Teaching Learning Environment" was conducted by Asst. Prof

Upasana Roy, Asst. Prof. Seema Singh, Asst. Prof Shahaji Nikalje, distinguished educator and researcher, as part of the ongoing conference. The presentation focused on the critical role of digital literacy in shaping modern teaching-learning environments and the strategies educators can use to foster these skills in students and teachers alike. The aim was to highlight how digital literacy contributes to the creation of an innovative, engaging, and effective learning environment, particularly in the context of the rapidly evolving digital

### **7. Guest speaker for valedictory Digital Skills and Competencies for Educators."**

The valedictory session of the conference was bold and it concluded with a highly informative and inspiring address by the esteemed guest speaker, Dr. Sunayna J Kadle, on the topic "Digital Skills and Competencies for Teacher Educators. "This address aimed to highlight the essential digital skills and competencies that educators must develop to effectively teach in the digital age and equip students for success in an increasingly technology-driven world. The session also focused on how educators can integrate these skills into their teaching practices to foster better learning outcomes.

The guest speaker concluded by reinforcing the idea that digital skills are no longer optional but essential for educators. The key takeaways from the address included: Digital competence is foundational for effective teaching in the 21st century, helping educators engage students and enhance learning outcomes. Ongoing professional development is crucial to keep up with evolving digital tools and techniques

Technology can support differentiated learning, enabling personal in 1 education for students with diverse needs. Educators must foster critical thinking and problem-solving in students through the use of digital tools, preparing them for the challenges of the modern era. The conference included several interactive sessions that allowed attendees to practical insights and digital understanding.

### **Feedback and Reflections**

The conference received an overwhelmingly positive response from attendees, who expressed appreciation for the practical insights shared by the keynote speakers and panelists. Some key takeaways from the conference included:

A deeper understanding of how digital literacy can enhance both teaching and learning outcomes and Knowledge of innovative tools that can make the learning process re-

engaging and interactive awareness of the challenges involved in implementing digital literacy and the ways to overcome them. Motivation to integrate digital technologies into their transacting practices and to continue evolving alongside educational advancements

### **Conclusion:**

The conference on "Fostering Digital Literacy for Preparing Innovative Teaching-Learning Environment" successfully provided a platform for educators to discuss, explore, and learn about the significant role of digital literacy in the educational sector. With the knowledge gained from the conference, participants promote innovative, technology-driven learning and the need for educators to remain adaptable and proactive in preparing students for the future. The keynote address provided valuable insights into the powerful role AI can play in enhancing teaching. AI tools can personalize learning, adapting to student's individual needs and learning pace

Teachers can benefit from AI by reducing administrative workloads and focusing on more impactful, creative teaching strategies. Ethical considerations and proper teacher training are crucial for the effective and responsible use of AI in educational is shaping the future of education, and educators need to stay informed and adaptable to harness its full potential

The address was well-received, with many participants expressing excitement about the possibilities AI brings to the education sector. The speaker's emphasis on balancing technological integration with human interaction reinforced the idea that AI should be viewed as a tool to complement, not replace, traditional teaching practices

Sr. No	Name	No. of Students
1	Students	61
2	Teachers/Faculties	15
	Total	76

Dr. Ratnaprabha Rajmane  
Principal