



INNOVATIVE TECHNOLOGIES IN

ICT

FOR EDUCATION



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PREFACE

We need technology in every classroom and every student and teacher's hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world. Information and Communication Technology (ICT) is a boon in the academic field. The Digital revolution has a tremendous impact and it is experienced in every sector. ICT is widely used in our everyday lives, and its need is growing in the Education sector. Images, texts, audios, videos, presentations, or a combination of these used for teaching constitute ICT in Education. Nowadays teachers need to apply the Multimedia Design Process (MDP) in teaching-learning situations. Various methods, approaches, and techniques are inculcated during the teaching-learning process. However, the exclusive and extraordinary impact of ICT cannot be denied. *Computer Assisted Language Learning (CALL)*, *Computer-Supported Collaborative Learning (CSCL)*, *Constructive Instructional Model (CIM)*, *Cognitive Instructional Approach (CIA)*, *Technology Acceptance Model (TAM)*, and *Technological Pedagogical Content Knowledge (TPCK)*, have caused a dynamic effect on *Second Language Acquisition (SLA)*. *Integration of ICT Standards and Social Media tools for Task-Based Language Learning (TBLL)* enables the learners to interact in a Collaborative Learning Environment (CLE). The importance of ICT in the Education sector is huge and soon will be an integral part of Higher Education Institutions (HEI). National Education Policy 2020 has rejuvenated the curriculum to include ICT for the holistic development of 21st-century learners. The NEP 2020 of India provides a 21st-century framework from elementary education to higher education, vocational education to technical education, and new innovative methods of teaching and learning. Along with the implementation of ICT tools, it is necessary to train educators to harness the true potential of ICT. Digital Literacy is an important aspect of the application of technology in the classroom. Quality Education is essential to achieve Sustainable Development Goal 4 in Education.

Dr. Kirti Diddi

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Abbreviations

Academic Bank of Credit (ABC)
Augmented Reality (AR)
Autism Spectrum Disorder (ASD)
Central Board of Secondary Education (CBSE)
Closed Circuit Television (CCTV)
Cognition and Technology Group at Vanderbilt [CTGV]
Collaborative Learning (CL)
Collaborative Learning Environment (CLE)
Colleges of Education (CEs)
Community of Practice (CoPs)
Computer Assisted Instruction (CAI)
Computer Assisted Language Learning (CALL)
Computer Literacy and Studies in School (CLASS)
Computer Managed Instruction (CMI)
Computer-Assisted Instruction (CAI)
Computer-Mediated Communication (CMC)
Computer-Supported Collaborative Learning (CSCL)
Digital Learning Resources (DLR)
Digital Multimedia Environments (DME)
Government Colleges for Elementary Teachers (GCETs)
Higher Education Commission of India, (HECI).
Higher Education Institutions (HEI)
Information and Communication Technologies (ICT)
Information Technology (IT)
Institutional Development Plan (IDP)
Integrated Education for Disabled Children (IEDC)
Interactive White Board (IWB)
Learning Management System (LMS)
Multimedia Design Process (MDP)
National Council of Educational Research & Training (NCERT)
National Council of Teacher Education (NCTE)
National Curriculum Framework (NCF)
National Curriculum Framework for Teacher Education (NCFTE)
National Education Policy (NEP)
National Higher Education Qualification Framework (NHEQF)
National Knowledge Commission (NKC)
National Open School (NOS)

National Policy on Education (NPE)
National Repository for Open Educational Resources (NROER)
New Education Policy (NEP)
Open Educational Resources (OERs)
Perceived Ease of Use (PEOU)
Perceived Usefulness (PU)
Program of Action (PoA)
Sarva Shiksha Abhiyan (SSA)
Satellite Instructional Television Experiment (SITE)
Second Language Acquisition (SLA)
Senior Secondary Schools (SSS).
Sustainable Development Goal (SDG)
Task-Based Language Teaching (TBLT)
Technological Content Knowledge (TCK)
Technological Pedagogical Content Knowledge (TPCK)
Telecom and Computer Networks Group (TelNet)
Central Advisory Board of Education (CABE)
Technology Acceptance Model (TAM)
United Nations Educational Scientific and Cultural Organization (UNESCO)
Technological Pedagogical Knowledge (TPK)
UGC's Higher Educational Television Project (HETP)
University Departments of Education (UDEs)
Virtual Learning Environment (VLE)
World Wide Web (WWW)

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