Role of ICT & Educational Technology in Higher Education

(Volume - 02)

Role of ICT & Educational Technology in Higher Education

(Volume - 02)

Editor

Dr. Shyam Ragini Gautam Dr. Lohans Kumar Kalyani Sonali Jaiswal

Surya Multidisciplinary Publication Gonda, U.P.

ISBN: 978-81-972279-7-4

© : Editor

First Edition : 2024

Price : ₹ 595/-

Published By : Surya Multidisciplinary Publication

407, Ramlila Maidan, Malviya Nagar

Gonda, Uttar Pradesh-2771001

Mob. +91-9415093911

Cover Design By: Shashikant Singh

Printed By: Kaushik Offset Printers

Composed By : Rajive Kumar Verma

Note – For every article printed in the book, the author of the article concerned will be solely responsible, the editor and publisher of the book will not have any responsibility.

Role of ICT & Educational Technology in Higher Education (Vol-2)

By Dr. Shyam, Ragini Gautam,

Dr. Lohans Kumar Kalyani, Sonali Jaiswal

Rs. ₹ 595.00

Preface

The integration of Information and Communication Technology (ICT) and educational technology in higher education continues to redefine the way we approach teaching and learning. As institutions worldwide adapt to the changing demands of a digital era, it becomes clear that technology is not merely an adjunct to traditional education but a transformative force with the potential to revolutionize the entire educational experience. This second volume of Role of ICT & Educational Technology in Higher Education builds on the foundation laid in the first, delving deeper into the evolving role of these technologies in creating inclusive, accessible, and student-centered learning environments.

The pace of technological advancement, coupled with the ever-expanding access to digital tools, has given rise to new pedagogical possibilities. In this volume, we continue to explore how emerging technologies such as artificial intelligence, virtual reality, and adaptive learning systems are being used to personalize education, enhance student engagement, and improve learning outcomes. At the same time, we acknowledge the complexities and challenges that accompany this integration, particularly concerning digital equity, infrastructure, and the evolving role of educators.

One of the primary objectives of this second volume is to examine how ICT and educational technology are shaping the future of higher education, not just in terms of teaching methodologies but also in broader institutional practices. This includes a focus on administrative efficiencies, data analytics, and how digital tools are enabling more streamlined and responsive educational systems. By offering insights into these developments, this volume seeks to provide educators, researchers, and policymakers with practical and theoretical perspectives on the opportunities and challenges presented by technology in higher education.

A key theme of this volume is the increased emphasis on flexibility and accessibility in education. ICT has opened doors for non-traditional learners, including working professionals, international students, and individuals with disabilities, by providing flexible learning options such as online courses, hybrid models, and open educational resources. The global pandemic highlighted the necessity of these tools and forced many institutions to rethink their delivery methods. This volume takes into account the lessons learned from that period and considers how ICT can continue to support more resilient and adaptable educational systems in the future.

Yet, as we celebrate the possibilities, we must also remain mindful of the digital divide that persists in many regions. While some institutions are equipped with cutting-edge technology, others struggle with basic infrastructure challenges, leaving students and educators at a disadvantage. Addressing these disparities is crucial for ensuring that the benefits of ICT in education are shared equitably across the globe.

In this volume, we have brought together contributions from educators, technologists, and researchers from around the world, offering a range of case studies and perspectives that highlight both the successes and the ongoing challenges in this field. We hope this collection continues to serve as a valuable resource for those committed to advancing the role of ICT and educational technology in higher education.

We extend our sincere gratitude to the contributors for their insightful work and dedication. As we look ahead, we remain optimistic about the potential of technology to create more inclusive, engaging, and effective educational experiences for all.

Contents

	Editorial	5
1.	Essentials of Language Laboratory in Education Akhil Kumar Rai Garima Rai	9
2.	Problems and prospects of blended learning; Insights from the COVID-19 pandemic Arun T. Ram Syama M. Mohanan	18
3.	ICT-Enriched Constructivist Approach Dr. Anita Jaiswal	38
4.	Transforming Education: How AI is Revolutionizing Learning Experiences Dr. Kavitha Thakur	47
5.	An Swoc Analysis on Indira Gandhi National Open University (Ignou)Main Role in the Swayam (Study Webs of Active-Learning for Young Aspiring Minds) Plattform Initiative by the Government of India Dr. M. Dinesh Kumar	52
6.	Project Based Learning Dr. Rashmi Chaturvedi	65
7.	Adapting to the Future: The Role of Technology in India's Higher Education System Dr. Sneh Lata	72
8.	Artificial Intelligence in Education Gaurav Sharma	82
9.	Artificial Intelligence and Blended Learning: A Synergistic Approach for Enhanced Educational Outcomes Mayank Verma	88

10.	The Role of ICT in Enhancing teaching and Learning in Higher Education Ms. Athulya K	99
11.	Artificial Intelligence & Cyberbullying Ms. Sangam Singh Dr. Jitendra Kumar	108
12.	Exploring the Future of Education: Study on Integrating Artificial Intelligence into Learning Systems among the college students Nandhini R.	114
13.	Role of ICT & Educational Technology in Higher Education Parul Kashyap	124
14.	The use of Information and Communication Technologies has Improved the Quality of Higher Education Pradeep Tripathi	132
15.	E- Learning Priya Yadav	142
16.	NEP 2020 and the Transformative Role of ICT in Higher Education: A Comprehensive Analysis Sandhya Yadav	164
17.	E-Learning and Virtual Classroom Shashi Kant Rishi Kumar Singh Anuj Dixit	172
19.	Arousing Interest among Students Through Flexible Learning Sheetal Prajapati Yogesh Pachauri	179
20.	Future-Proofing Education: The Critical Role of ICT in Bridging Global Educational Gaps Suraj Gupta Dr. Vimal Singh	187
21.	वर्तमान में महिला शिक्षा और सुरक्षा सारिका यादव	199