



PROSPECTS OF ARTIFICIAL INTELLIGENCE (AI) AND PERSONALIZED LEARNING IN INCLUSIVE EDUCATION INTEGRATED TO THE NATIONAL EDUCATION POLICY (NEP) - 2020

VOLUME - II

Chief Editors

Dr.P.Archanaa | Dr.T.Mohana Sundari

Editors

**Mr.A.Prakalathan | Dr.D.Saranya | Dr.M.Nirmala
Dr.P.V.Nandhini | P.Divya Bharathi**



PROSPECTS OF ARTIFICIAL INTELLIGENCE (AI) AND PERSONALIZED LEARNING IN INCLUSIVE EDUCATION INTEGRATED TO THE NATIONAL EDUCATION POLICY (NEP) - 2020

Chief Editors

Dr.P.Archanaa

Assistant Professor & Head, Department of Commerce (CA)

Dr.T.Mohana Sundari

Assistant Professor, Department of Commerce (CA)

Editors

Mr.A.Prakalathan | Dr.D.Saranya

Dr.M.Nirmala | Dr.P.V.Nandhini | P.Divya Bharathi

Assistant Professor, Department of Commerce (CA)

Sponsored by

INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH (ICSSR-SRC)

Hyderabad.

Organized by

DEPARTMENT OF COMMERCE (CA)

NALLAMUTHU GOUNDER MAHALINGAM COLLEGE

An Autonomous Institution Affiliated to Bharathiar University

Re-Accredited with A++ by NAAC & ISO 9001:2015

Certified NIRF Ranking 101-150 Pollachi,

Coimbatore - 642001 Tamil Nadu

**PROSPECTS OF ARTIFICIAL INTELLIGENCE (AI) AND
PERSONALIZED LEARNING IN INCLUSIVE EDUCATION
INTEGRATED TO THE NATIONAL EDUCATION POLICY (NEP) - 2020**

© **Chief Editors**

Dr.P.Archanaa, *Assistant Professor & Head, Department of Commerce (CA)*

Dr.T.Mohana Sundari, *Assistant Professor, Department of Commerce (CA)*

Editors

Mr.A.Prakalathan | Dr.D.Saranya

Dr.M.Nirmala | Dr.P.V.Nandhini | P.Divya Bharathi

Assistant Professor, Department of Commerce (CA)

ISBN: 978-93-94004-30-6

Price: Rs. 650.00/-

Copyright

All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transmitted. In any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of the author.

Printed at

SHANLAXPUBLICATIONS

61, 66 T.P.K. Main Road

Vasanthanagar

Madurai - 625003

Tamil Nadu, India

Ph: 0452-4208765

Mobile: 7639303383

[email:publisher@shanlaxpublications.com](mailto:publisher@shanlaxpublications.com)

[web: www.shanlaxpublications.com](http://www.shanlaxpublications.com)

26	Designing Learner-Centric Adaptive Learning Platforms: Insights from NEP 2020 Dr. G. Nithya	132
27	AI Enabled Personalized Learning for Inclusive Classrooms under NEP 2020 Dr. B. Rohini	136
28	Learner-Centric Digital Pedagogy: Adaptive Learning Platform Design in Line with NEP 2020 Dr. S. Kokilavizhi	142
29	Emotional Intelligence and Leadership Effectiveness in AI- Driven Organizations: A NEP 2020 Perspective Dr. T. Kiruthika	148
30	Ethical Considerations & Data Privacy (Collecting and Analyzing Sensitive Student Data for Personalization) Dr. G. Vignesh & Ms. B. Sri Durga	153
31	Aligning Artificial Intelligence and Yoga-Based Wellness with NEP 2020 for Inclusive and Personalized Education Dr. T. Sumadhi	157
32	Bridging the Critical Gap between Digital Proficiency and Employability Competence among Rural Students in Tamil Nadu's IT Sector Abhishek Narayan J	164
33	Building Teacher AI Literacy emphasized by the NEP 2020 Balamurugan R	172
34	From Policy to Practice: A Case Study on AI-Enabled Personalized Learning for Inclusive Education under NEP 2020 Dr. D. Padma & Mrs. S. Vishnu Priya	177
35	An Analysis on Adoption of Artificial Intelligence in Learning- Balancing Benefits and Risks among Commerce Students of selected Colleges at Coimbatore Region M. Akilesh, P. Sree Ram & Dr. S. Subha	181
36	Designing Adaptive Learning Platforms with NEP 2020's Learner Centric Approach B. Dharshinivishnupriya & Dr. R. Velmurugan	190
37	Artificial Intelligence in English Language Teaching: Aligning ELT with NEP 2020 Mr. M. Vairamuthu	199
38	Digital Application of NEP 2020 in Higher Education Dr. R. Ramya	202

DIGITAL APPLICATION OF NEP 2020 IN HIGHER EDUCATION

Dr. R. Ramya

Assistant Professor, UG Department of Commerce with (CA)

Nallamuthu Gounder Mahalingam College, Pollachi

Email.id: ramya.mohan548@gmail.com

Abstract

Digital application is an approach to teaching that uses technology to improve and speed up the learning process. It entails delivering instructional information, involving students, and fostering interactive learning experiences through digital technologies and resources. The study's importance stems from its capacity to provide valuable insights for evidence-based decision-making, policy development, and implementation tactics to achieve the goals delineated in NEP 2020 and cultivate a practical digital application in an educational environment. The study identified several stages of digital application in this article, the main initiatives related to digital application at the ODL higher education level, Furthermore, a Case study of the NSOU-ODL showed that they have successfully implemented a number of the NEP-2020's suggested initiatives, including digital libraries, blended learning, open educational resources, credit transfer, online assessments, learning management systems, massive open online courses, active learning websites for aspiring learners, and digital infrastructure. Findings explored that the digital application has great promise for transforming education; it is crucial to guarantee that it is accessible to all students, irrespective of their situation or socio economic status.

Keywords: Digital Application, NEP 2020, ICT, Digital Libraries, Blended Learning

Introduction

Digital application is an approach to teaching that uses technology to improve and speed up the learning process. It entails delivering instructional information, involving students, and fostering interactive learning experiences through digital technologies and resources. Online classes, virtual classrooms, instructional applications, multimedia presentations, and other digital platforms fall under this category. Compared to traditional classroom-based education, this learning has several benefits. It give student access to a wide range of materials and knowledge, allowing them to investigate various viewpoints and get sources. Because students can choose materials that suit their interests and learning. The National Education Policy (NEP) 2020 is a India's educational system Ministry of Education, Government of India (2020).This policy aims to cultivate critical thinking, creativity, and the holistic development of students while promoting an egalitarian and inclusive approach to education. The NEP places significant emphasis on integrating digital applications and using technology to enhance teaching and learning experiences Ministry of Education , Government of India (2020). It recognises the potential of online resources and digital infrastructure to broaden access to high-quality education, particularly in rural regions.

Several universities in India have successfully implemented digital policies under NEP 2020, showcasing innovative approaches to higher education. Delhi University has embraced NEP 2020 by integrating multidisciplinary learning and digital education platforms. The university has focused on equity and inclusion, ensuring students from diverse backgrounds benefit from digital advancements Singh (2023). HNB Garhwal University, a central university in Uttarakhand, has been proactive in implementing NEP 2020, even contributing to its finalisation.

Review of Literature

ICT integration in education started in the late 20th century with the introduction of computers Kumar (2016). To make learning more dynamic and engaging, the National Council of Educational Research and Training (NCERT) created software for various courses NCERT (n.d.). The Indian government has launched several programs in the twenty-first century to encourage ICT integration and digital literacy in the classroom. The incorporation of ICT tools into teaching and learning processes was stressed in the National Policy on ICT in School Education (2012).

Rudrawar and Ratnaparkhi (2023) discovered their ideas by examining how the government introduced the National Education Policy (NEP), which emphasises that rapid development of widespread education depends on digitalisation. Additionally, it emphasises using edtech to advance education, especially in rural regions. This primarily aims to provide high-quality education nation wide (S. Arorain New Education Policy 2020 and Online Education, 2023).

Kumari and Tiwari (2023) showed that the goal of NEP 2020 is to provide the policy base for a new India. It aims to revolutionise India's educational system so everyone may receive a top-notch education, making the country a global knowledge superpower. Through NEP 2020, we can integrate e-learning into our educational system, revolutionising the field and enabling our students to keep up with the educational systems of industrialised nations.

Digital Applications Take Aways from NEP 2020

Methodology

The research employed a qualitative design supported by primary and secondary data sources. The study has tried to showcase various viewpoints, theories, and empirical knowledge. The majority of the research work has involved scanning and analysing the NEP-2020 document and other public material related to the subject.

Objectives

- To explore the various stages of digital application as outlined in NEP 2020.
- Usage and Integration of Technology
- Digitalised Learning Ensuring equity in technology usage
- Initiating a separate unit for developing a digitalized educational infrastructure of a global standard

Usage and Integration of Technology

To provide a platform for the unfettered exchange of ideas on how to use technology to enhance planning, administration, evaluation, and learning in higher education and the classroom, the National Educational Technology Forum (NETF), an independent organisation, will be founded. It will be able to do the following functions:

Offer impartial, fact-based guidance on technology-based interventions to federal and state government agencies.

Develop institutional and intellectual capabilities in educational technology. c) Identify areas of strategic interest.

Disruptive Technology: Contributions to the Curriculum in Schools

As disruptive technologies emerge, education and ongoing training will contribute to increasing public understanding of their possible disruptive impacts. Disruptive technologies, like those highlighted by NETF/Ministry of Education, will be discussed in class as part of studying current events and ethical issues.

They may create and distribute courses in these fields using various online platforms. The SWAYAM platform, initiated by Govt. of India, could be a good example.

Implementation: Foreseeing the Future

Suggestions for Policy Framing- The 2020 policy has emphasised the integration of digital technologies in higher education to ensure quality and inclusive learning. The following suggestions for policy framing could further strengthen its digital applications:

Windows for Future Research-

Investigating the impact of AI-driven tool son enhancing student engagement and improving academic performance. Analysing the comparative advantages of fully online learning versus blended learning methodologies. Examining strategies to ensure equitable access to digital education for marginalized communities. Exploring concerns related to data privacy, artificial intelligence bias, and ethical considerations in digital learning environments. These research areas can help shape the future of digital education under NEP 2020, ensuring that technology is leveraged effectively at the higher education level.

Implementation in Higher Education- Universities can practically implement digital policies under NEP 2020 by focusing on infrastructure, faculty training, and student engagement. The key strategies could be summarised as follows:

The advancement of digital infrastructure necessitates expanding high-speed internet access throughout campuses. Universities should increase their investment in smart classrooms equipped with interactive digital boards and AI-driven educational tools. They should also aim to create centralized learning management systems (LMS) to facilitate digital literacy should be a compulsory aspect. Digital training sessions for educators should be implemented as required. Faculty members must be motivated to utilise AI-powered teaching resources and adaptive learning platforms. Collaborative research in the field of

digital education methods should be encouraged online learning. Training for faculty and enhancing

The Universities and national research agencies (for example, the Indian Institute of Social Science Research should think of creating data privacy policies to safeguard student information. Awareness initiatives regarding the ethical use of AI in education should be organised. Utilizing block chain technology for secure verification of academic credentials could be more effective. Partnerships between the public and private sectors to innovate in Ed Tech solutions and collaborating with government programs could improve digital accessibility at the ground level.

Conclusion

The digitalization process in higher education, as documented by the NEP 2020, has the potential to radically alter the availability and delivery of education. The policy strongly emphasizes using digitalized methods and ways of teaching and learning, which can provide learners with more flexible, accessible, and customised learning opportunities. Higher education institutions can use digital tools and platforms to reach a wider audience, regardless of location. People residing in remote regions or unable to travel to conventional classrooms may find this particularly useful. Through engaging and interactive learning opportunities, digital application of NEP 2020 can enhance education. Using multimedia resources, simulations, virtual labs, and collaborative online platforms, students can become more involved in their education and cultivate analytical thinking and problem-solving skills. In conclusion, through its digital implementation, the policy has enormous potential for a sea change in the arena of higher education.

References

1. **Arora, S. (2023).** New Education Policy 2020 and Online Education. *Library Philosophy and Practice* (e-journal), 7966.
2. **Das, M. (2023).** Digital Application in the Context of NEP 2020: A Comprehensive Analysis. *International Journal of Research Publication and Reviews*, 4(12), 1764-1768.
3. **Datta, R., & Mete, J. (2021).** Digital Initiatives of New Education Policy 2020 on Higher Education in India. *Asian Journal of Electrical Sciences*, 10(2), 44-50. <https://doi.org/10.51983/ajes-2021.10.2.3169>
4. **Kumar, P. (2016).** ICT in Education: A Comparative Analysis of ICT Integration in Schools in Singapore and India. *International Journal of Education and Development Using Information and Communication Technology*, 12(1), 4-15.