Exploring The Adoption Of E-Books By Academic Students Within The Framework Of The New Education Policy 2020

Shilpi Verma
Research Scholar
Department of Education
Agrawan Heritage University, Agra, India

Abstract: The New Education Policy (NEP) 2020 in India advocates for the integration of digital technologies into the educational landscape, with e-books emerging as a pivotal component in this transition. This study investigates the adoption of e-books among secondary education students in the context of NEP 2020, aiming to understand students' perceptions, the impact of e-books on their learning experiences, and the challenges encountered. Utilizing a mixed-methods approach, the research involved a structured questionnaire and semi-structured interviews with 30 students. The findings reveal a high level of familiarity with NEP 2020 among students and unanimous agreement on the improved availability and accessibility of e-books compared to traditional textbooks. Most students report encountering technical issues rarely and express satisfaction with e-book design and navigation. However, there is a notable demand for additional training and resources to optimize e-book use. While e-books generally maintain or enhance motivation for learning, the impact varies among students. The study highlights the alignment of e-books with NEP 2020's goals but also identifies areas for improvement, including technical support, design enhancements, and further training. These insights are crucial for policymakers and educators aiming to effectively implement NEP 2020 and enhance educational outcomes through digital tools.

Keywords: Educational Technology, New Education Policy (NEP) 2020, Technology Integration, Learning Motivation, Professional Development, Digital Learning, E-books.

Introduction

The integration of digital technologies into education is reshaping the traditional learning landscape, with the New Education Policy (NEP) 2020 in India serving as a catalyst for this transformation. As part of its vision to modernize the education system, NEP 2020 emphasizes the adoption of digital resources and tools, with e-books emerging as a key component in this digital shift. E-books offer a versatile platform for learning, providing students with immediate access to a vast array of educational materials, interactive features, and

multimedia content. This digital format is designed to complement and enhance traditional learning methods, aligning with NEP 2020's goals of fostering a more inclusive, accessible, and engaging educational environment.

This research explores the adoption of e-books among secondary education students within the framework of NEP 2020. It aims to investigate how students perceive the use of e-books, the impact of these digital tools on their learning experiences, and the challenges they encounter. Understanding these dynamics is crucial as schools and educational policymakers seek to implement NEP 2020 effectively, leveraging technology to improve educational outcomes.

The study focuses on several key areas: student familiarity with NEP 2020, the availability and accessibility of e-books, the technical issues encountered, user satisfaction with e-book design and navigation, the impact of e-books on student motivation, and the need for additional training and resources. By examining these aspects, the research seeks to provide a comprehensive analysis of the benefits and limitations of e-books in secondary education and their alignment with the objectives of NEP 2020.

Through a detailed exploration of student perspectives and experiences, this research aims to inform educational stakeholders—including policymakers, educators, and curriculum developers—about the effectiveness of e-books as a learning tool. The findings will contribute to the ongoing efforts to integrate digital resources into the education system, ensuring that the transition to e-books enhances the learning experience and supports the broader goals of NEP 2020.

Research questions

1. How do secondary education students perceive the use of e-books as a learning tool within the framework of the New Education Policy 2020?

2. How satisfied are students with the design and navigation of e-books, and what improvements can be made to enhance their usability?

Objectives:

1. To evaluate secondary education students' perceptions of e-books, including their attitudes toward e-books as learning tools and their alignment with the New Education Policy (NEP) 2020 goals.

2. To identify technical issues students, face with e-books and assess their impact on usability and effectiveness as educational resources.

Literature Review:

Smith, J., et al. (2019). "The Impact of E-Books on Secondary Education Learning Outcomes."

Found that students using e-books showed significant improvement in comprehension and retention compared to traditional textbook users. This suggests that integrating e-books into the curriculum aligns with the goals of the New Education Policy 2020, which emphasizes holistic learning and skill development.

Johnson, A. (2018). "Digital Textbooks in Secondary Education: Accessibility and Challenges."

Highlights the myriad accessibility features of e-books, including adjustable text size, audio narration, and multimedia content, tailored to accommodate diverse learning needs such as visual impairments, reading difficulties, and auditory processing challenges. E-books present a promising solution to address educational

barriers faced by students with disabilities, English language learners, and marginalized populations, fostering a more inclusive learning environment through customizable features and accommodation of varied learning styles. Aligned with the objectives of the New Education Policy 2020, e-book integration promotes inclusivity and accessibility in education by providing flexible and adaptable learning resources. Through leveraging e-books' inherent accessibility features, educators can ensure equitable access to quality education, thus preventing marginalization and exclusion among students.

Garcia, E., et al. (2020). "Teacher Perceptions of E-Book Adoption: A Qualitative Study."

Found that teachers who received training and support in integrating e-books into their teaching reported higher levels of confidence and satisfaction. This underscores the importance of professional development programs that equip teachers with the knowledge and skills needed to effectively utilize e-books in the classroom. Adequate training can empower teachers to leverage the interactive features of e-books and tailor their instructional practices to meet the diverse needs of students.

Chu, H. C., et al. (2017). "Investigating Elementary School Students' Technology Acceptance by Applying Digital Storytelling to Environmental Learning."

Underscore the pivotal role of e-books as dynamic digital learning resources. These resources not only offer interactive features and multimedia content but also serve as catalysts for the development of crucial digital skills such as information literacy, media literacy, and critical thinking. Through engagement with e-books, students are empowered to navigate self-directed learning journeys and access a vast array of online information and resources. Aligning with the robust emphasis on digital literacy and technological proficiency within the New Education Policy 2020, e-book adoption emerges as a cornerstone for enhancing students' ability to navigate digital environments and effectively utilize technology for learning purposes. By integrating e-books into the curriculum, educators can effectively equip students with the essential digital literacy skills required to thrive in the ever-evolving 21st-century digital landscape, thus strongly aligning with the overarching objectives of the New Education Policy 2020.

Lei, J., & Zhao, Y. (2018). "Digital Textbooks in Secondary Education: A Systematic Review of Adoption, Use, and Effects."

Illuminate the formidable challenge posed by the digital divide and disparities in technology access, which significantly impede the widespread adoption of e-books in education. Students hailing from low-income households or underserved communities often encounter barriers such as inadequate access to requisite devices and internet connectivity essential for effectively utilizing e-books. This gaping digital chasm not only exacerbates prevailing educational inequalities but also curtails opportunities for marginalized students to leverage the educational benefits conferred by e-book resources. Policymakers are thus entrusted with the pivotal responsibility of redressing these disparities to ensure equitable access to e-books for all students. To this end, various initiatives emerge as viable solutions, including the provision of subsidized or loaned devices, the enhancement of internet infrastructure in underserved regions, and the implementation of comprehensive digital literacy training programs. Such concerted efforts hold the potential to bridge the digital divide and empower students from diverse socioeconomic backgrounds to access and leverage e-book resources effectively, thereby fostering inclusivity and equity in education.

Methodology

This study employs a mixed-methods research design, combining quantitative and qualitative approaches to examine the adoption of e-books among secondary education students within the NEP 2020 framework. A purposive sample of 30 students from diverse socio-economic backgrounds was selected. Quantitative data were gathered through a structured questionnaire addressing familiarity with NEP 2020, e-book accessibility, technical issues, and user satisfaction. To complement this, semi-structured interviews with 10 students provided deeper qualitative insights into their experiences with e-books.

Data analysis involved descriptive statistics for the quantitative data and thematic analysis for the qualitative responses. The study ensured validity through pilot testing and enhanced credibility by triangulating both data types. Ethical considerations, including informed consent and participant confidentiality, were prioritized. Despite limitations like the small sample size and geographic focus, this methodology offers a thorough understanding of student perspectives on e-book adoption under NEP 2020, contributing valuable insights for policymakers and educators.

DATA ANALYSIS

Familiarity with NEP 2020	Frequency	Percent	Valid Percent	Cumulative Percent
Very familiar	20	66.7	66.7	66.7
Somewhat familiar	10	33.3	33.3	100.0
Total	30	100.0	100.0	

Source: Field Survey

Table 1: reveals that 66.7% of secondary education students are "Very familiar" with the objectives of the New Education Policy (NEP) 2020, indicating a strong understanding of the policy. The remaining 33.3% are "Somewhat familiar," suggesting partial awareness with potential gaps in knowledge. Overall, all respondents (100%) have some level of familiarity with the NEP 2020, which bodes well for its successful implementation in the education system.

E-Books Availability and Accessibility	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	30	100.0	100.0	100.0

Source: Field Survey

Table 2: indicates that 100% of respondents believe e-books are readily available and accessible compared to physical textbooks under the New Education Policy (NEP) 2020. This unanimous response highlights a strong consensus among students that e-books offer superior availability and ease of access, aligning well with the NEP 2020's goals of enhancing educational resources and digital integration.

Frequency of Technical Issues	Frequency	Percent	Valid Percent	Cumulative Percent
Rarely	23	76.7	76.7	76.7
Occasionally	7	23.3	23.3	100.0
Total	30	100.0	100.0	

Source: Field Survey

Table 3: shows that 76.7% of respondents encounter technical issues with e-books only "Rarely," while 23.3% experience issues "Occasionally." This distribution indicates that the majority of students infrequently face technical problems when using e-books for learning, suggesting that e-books are generally reliable for most users. However, the presence of occasional issues for a smaller portion of students highlights areas where further improvements could enhance the overall user experience.

Satisfaction with E-Book Design	Frequency	Percent	Valid Percent	Cumulative Percent
Neutral	8	26.7	26.7	26.7
Satisfied	20	66.7	66.7	93.3
Very Satisfied	2	6.7	6.7	100.0
Total	30	100.0	100.0	

Source: Field Survey

Table 4: reveals that 66.7% of respondents are "Satisfied" with the overall user interface and design of e-books compared to traditional textbooks, while 6.7% are "Very Satisfied." Meanwhile, 26.7% of students are "Neutral" regarding their satisfaction. This indicates a generally positive response to the user interface and design of e-books, with most students expressing satisfaction. However, a notable portion remains neutral, suggesting there may still be room for improvement in the design and usability of e-books.

Ease of Navigating E-Books	Frequency	Percent	Valid Percent	Cumulative Percent
Neutral	10	33.3	33.3	33.3
Easy	20	66.7	66.7	100.0
Total	30	100.0	100.0	

Source: Field Survey

Table 5: shows that 66.7% of respondents find it "Easy" to navigate through e-books compared to traditional textbooks, while 33.3% are "Neutral" about the ease of navigation. This suggests that most students find e-books more user-friendly and easier to navigate than traditional textbooks. The neutral responses indicate that while many students appreciate the ease of use, there is still a segment that may not experience a significant difference in navigation ease.

Motivation to Study with E-Books	Frequency	Percent	Valid Percent	Cumulative Percent
More motivated	10	33.3	33.3	33.3
Equally motivated	20	66.7	66.7	100.0
Total	30	100.0	100.0	

Source: Field Survey

Table 6: indicates that 66.7% of respondents feel "Equally motivated" to study when using e-books compared to traditional textbooks, while 33.3% feel "More motivated" with e-books. This shows that while a majority of students report no difference in motivation levels, a significant portion finds e-books to be a more motivating study tool. This suggests that e-books generally maintain or enhance motivation for studying, although the effect varies among students.

Need for Additional Training or Resources	Frequency	Percent	Valid Percent	Cumulative Percent
yes	23	76.7	76.7	76.7
no	7	23.3	23.3	100.0
Total	30	100.0	100.0	

Source: Field Survey

Table 7: reveals that 76.7% of respondents believe there is a need for additional training or resources to optimize the use of e-books in secondary education classrooms, while 23.3% do not see this need. This indicates a strong consensus among students that more support is required to effectively utilize e-books, suggesting that enhancing training and resources could improve the overall adoption and effectiveness of e-books in the educational setting.

Discussion

Perception and Familiarity with NEP 2020

- **Awareness Levels:** A notable **66.7%** of students are "Very familiar" with NEP 2020, reflecting a strong understanding of the policy's digital learning objectives. This high level of familiarity is crucial for successful e-book implementation, indicating that these students are likely to embrace digital resources effectively.

- **Knowledge Gaps:** The remaining **33.3%** who are "Somewhat familiar" suggest there are gaps in understanding that could hinder the seamless integration of e-books. It is essential to address these gaps through targeted educational initiatives to ensure all students are well-informed about the policy and its benefits.

Availability and Accessibility of E-Books

- **Unanimous Agreement: 100%** of respondents affirm that e-books are more readily available and accessible compared to traditional textbooks. This universal agreement supports NEP 2020's goal of enhancing resource availability and digital integration, providing a solid foundation for the adoption of digital learning tools.

Technical Issues and User Experience

- **Reliability: 76.7%** of students report encountering technical issues with e-books "Rarely," suggesting that e-books are generally reliable. However, **23.3%** who face issues "Occasionally" highlight the need for continuous technical support and improvements.

- **Recommendations:** Addressing these technical challenges is crucial for improving user experience and maximizing the benefits of e-books. Implementing robust technical support systems can mitigate these issues and enhance overall satisfaction.

Satisfaction with Design and Navigation

- **Design and Usability: 66.7%** of students express satisfaction with e-book design, and an equal **66.7%** find them "Easy" to navigate. These positive responses indicate that e-books are well-received in terms of usability and interface.

- **Areas for Improvement:** Despite the overall satisfaction, **26.7%** of students are "Neutral" about the design, and **33.3%** feel the same about navigation ease. This suggests that there is room for improvement in both design and functionality to better meet diverse user needs.

Impact on Motivation

- **Mixed Results:** While **66.7%** of students feel "Equally motivated" with e-books compared to traditional textbooks, **33.3%** report being "More motivated" by e-books. This variability indicates that e-books have the potential to enhance motivation for some students but may not uniformly affect all learners.

- **Further Investigation:** Understanding how e-books can be optimized to support different motivational needs is essential for maximizing their impact on student engagement and learning outcomes.

Need for Training and Resources

- **Demand for Support:** A significant **76.7%** of students believe that additional training and resources are necessary to fully leverage e-books. This highlights a critical area for development, emphasizing the need for comprehensive professional development and support materials.

- **Recommendations:** Investing in training programs for both students and educators is crucial for optimizing the use of e-books. Providing adequate resources and support will enhance the effectiveness of e-books and align with NEP 2020's objectives.

Conclusion

The adoption of e-books in secondary education, guided by the New Education Policy (NEP) 2020, represents a significant advancement in digital learning. The research indicates that most students are well-acquainted with NEP 2020, which facilitates the effective integration of e-books into their educational experience. Students universally acknowledge the enhanced accessibility of e-books over traditional textbooks, aligning with NEP 2020's goals of improving digital resource availability.

However, while e-books are generally dependable, occasional technical issues highlight the need for ongoing support and system refinements. Although the majority of students are satisfied with e-book design, there is potential for further improvement in user interface and functionality. Additionally, while most students find e-books easier to navigate than traditional textbooks, a segment of students remains neutral, suggesting a need for continuous optimization to meet varied preferences.

The impact of e-books on student motivation shows mixed results. While many students feel equally motivated or more motivated by e-books compared to traditional textbooks, others report no significant difference. This variation underscores the necessity to address diverse motivational needs to fully harness the potential of e-books. Furthermore, a strong majority of students express the need for additional training and resources to better utilize e-books, indicating that enhanced support is essential for maximizing their effectiveness in the classroom.

In summary, while e-books align well with NEP 2020 objectives by improving accessibility and integrating digital tools into education, addressing technical issues, enhancing design, optimizing navigation, and providing adequate training are crucial steps. These measures will ensure that e-books contribute effectively to a more inclusive and dynamic learning environment.

References

1) Garcia, E., & Martinez, L. (2020). Teacher perceptions of e-book adoption: A qualitative study. *Journal of Educational Technology*, *15*(3), 89-102.

2) Johnson, A. (2018). Digital textbooks in secondary education: Accessibility and challenges. *International Journal of Educational Technology*, *12*(2), 45-59.

3) Lei, J., & Zhao, Y. (2018). Digital textbooks in secondary education: A systematic review of adoption, use, and effects. *Journal of Educational Research*, *14*(4), 67-85.

4) Smith, J., Brown, K., & Williams, R. (2019). The impact of e-books on secondary education learning outcomes. *Educational Psychology Review*, *28*(1), 34-50.

5) Chu, H. C., Lin, Y. C., & Tsai, C. W. (2017). Investigating elementary school students' technology acceptance by applying digital storytelling to environmental learning. *Computers & Education*, *104*, 191-203.

6) Anderson, T., & Elloumi, F. (2019). The effectiveness of e-books in higher education: A comprehensive review. *Journal of Online Learning and Teaching*, *15*(2), 110-125.

7) Green, J., & Smith, M. (2020). E-books and the digital divide in education: Challenges and solutions. *Journal of Digital Learning*, *9*(4), 200-215.

8) Wilson, L., & Thomas, E. (2018). E-book integration in secondary education: Teacher perspectives and challenges. *Journal of Educational Innovation*, *21*(3), 78-94.

9) Lopez, R., & Chavez, S. (2017). E-books as a learning tool: Student engagement and outcomes. *Journal of Educational Media*, *14*(3), 112-130.

10) KUMAR, S., & GUPTA, A. (2019). E-BOOKS IN INDIAN EDUCATION: A STUDY OF ADOPTION AND IMPACT. *INDIAN JOURNAL OF EDUCATIONAL RESEARCH*, *25*(2), 50-68.