Mapping the Scholarly Discourse on National Education Policy (NEP) 2020: A Bibliometric Study

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Abstract

Purpose: This study is an attempt to map the scholarly communications surrounding the New National Education Policy (NEP) 2020. The study aims to identify the growth of research, contributing subject areas, relevant journal sources, prolific authors, affiliations, and map the co-authorship and co-occurrence network of publications on NEP 2020.

Design/methodology/approach: Bibliometric approach has been utilized in the study. Literature searched and retrieved from Scopus database for only journal documents, during the period of 2020-2024 is used in this study. Further analysis of dataset and its visualization is performed using MS Excel, Biblioshiny and VOSviewer.

Findings: Some major findings of the study are that growth of publications on NEP 2020 spiked after 2021 and continued. The citations received for publications were highest(86) in 2021. 55% of publications of NEP 2020 come from social science area. Journal of Engineering Education Transformations has published the maximum number of studies (22). Choudhury, Pradeep Kumarcame out as the most contributing author on the topic of study. JNU and DU have contributed the most on the topic. additionally, the research on NEP 2020 is fragmented, as many

isolated authors work independently or in small, disconnected groups.

Originality/value: This study attempts to provide a comprehensive overview of the current state of research on NEP 2020, including an analysis of co-occurrence and co-authorship networks. To the best of the authors' knowledge, no prior study has made an attempt to fill this gap.

Keywords: NEP 2020, National Education Policy, Indian Education Policy, Bibliometric, Network Analysis.

1. Introduction

Education is a core indicator of a society's development and the progress of a nation. A society enriched with education will ultimately prosper and flourish. The Indian education system has been distinguished since ancient times. India was home to some of the world's first universities, and its educational heritage was so advanced that scholars from foreign nations came to study and learn from it (Reddy et al., 2016).

After India's independence in 1947, the education system underwent major reforms to rebuild the nation. The University Education Commission (1948&49), led by Dr. S. Radhakrishnan(Mishra, 2018), and the Kothari Commission (1964&66) laid the foundation for modern education policies(Mukhopadhyay, 2017). These efforts led to the first National Policy on Education (NPE) in 1968, which aimed at free and compulsory education for children up to 14 years and promoted regional languages (Pandit, 2017). The second National Policy on Education in 1986 sought to address the challenges of faculty enhancement and development (Hegde, 2016). The 1986 NPE was updated in 1992 to meet new challenges(B. Singh & Mishra, 2018). However, as the 21st century progressed, it became evident that the education system needed further reform to keep pace with technological advancements and global developments (Dar, 2020).

In response, the Government of India introduced the New Education Policy (NEP) 2020, the first major reform in over three decades. NEP 2020 aims to make the education system more holistic, flexible, and aligned with 21st-century needs, while also preserving cultural traditions (Kumar et al., 2021). Key highlights include a new 5+3+3+4 curriculum structure, emphasis on multilingualism, experiential learning, early childhood education, and a focus on vocational training to prep are students for a rapidly evolving job market (NEP 2020, 2023).

After the release of NEP 2020, academics from across the country began critically analyzing and assessing its impact on education and learning, society, education system of the country, culture, language and other aspects. Researchers explored how the policy would influence their respective areas, leading to several academic papers addressing a wide range of issues, from pedagogical shifts to policy implications. These scholarly communications, covering diverse contexts and perspectives, need to be systematically measured and analyzed to understand the broader academic response and its influence on the educational landscape in India.

This study aims to map the scholarly communications on the new National Education Policy (NEP) 2020 by analyzing academic productivity, its impact, the distribution of subject areas, prolific authors and their affiliations, as well as examining co-authorship and co-occurrence networks.

2. Literature Review

A significant amount of scholarly work has been done on NEP 2020 addressing several issues and aspects related to social, policy, educational impact, teaching and others (Bhatt, 2023; Patil, 2024; Vagdal & Acharya, 2023). However, only a limited number of studies have attempted to assess the productivity of the topic and its other quantitative aspects. The investigators in their literature search on Scopus, Dimensions.ai, and Google Scholar found only two studies attempting to measure the scholarly communication on the national education policy of India. The study by Shukla & Khare (2024)is not particularly on NEP 2020; instead, they analyzed the publications on national education policy from 2002 to 2022. Their study was based on data collected from the Web of Science, in which they identified the most relevant sources, authors, affiliations, globally cited documents, relevant words, and application of Lotka's law. Some key findings of the study were that the International Journal of Early Childhood Special Education published the highest, 7 papers on national education policy, Charkrabarti, P. was the most prolific author, and JNU and BHU were among the most prolific affiliations, with 6And 4 publications, respectively.

M. Singh et al. (2024) in their book chapter analyzed Scopus-indexed publications on NEP 2020 published during 2019 to 2022. Using a scientometric approach and employing VOS viewer and R tools, the study identified prolific authors, affiliations, and global collaborations. The findings underscore that 154 out of a total of 273 authors have published at least 1 paper with a citation count. There had been a significant contribution from India, followed by the USA and other nations, providing valuable

insights into NEP 2020.

The literature review above shows that the specific research questions that this study aims to answer have not been fully explored in any other study. There is still a need to investigate the specific scholarly communication trends for NEP 2020. Previous studies have focused on the quantitative parts of national education policy publications, such as productivity, prolific authors, and affiliations. This study aims to fill that gap by giving a more thorough analysis and new ideas that haven't been explored in earlier studies, pertaining to NEP 2020.

3. Objectives of the Study

The specific objectives of the present study are listed below.

- * To measure the annual productivity and citation impact
- * To identify the subject area of publications
- * To identify the most relevant journal source
- * To identify the most prolific authors
- * To identify the most prolific affiliations
- * To map the co-authorship network
- * To map the co-occurrence network

4. Methodology

4.1 Search and Data Collection Technique

The data for the present study is collected on 05 September 2024 from Scopus, A well-known and renowned multidisciplinary citation and abstracting database, using a simple yet specific query "TITLE-ABS-KEY ("NEP 2020" OR "National Education Policy 2020" OR "India* Education Policy 2020")", which resulted in 232 documents. The breakdown of these documents based on source type resulted in 151 journal publications, 50 books, 20 conference proceedings, and 11 book series. More detailed information about the further constituents of the documents based on publication type is presented in Table 1 below. The language filter is not used in the query as only one journal article in Spanish was identified, but its title, abstract, and keywords were available in English, so authors included it in the study. No filter for year (timespan) is applied.

Table 1 Nature of documents on NEP 2020 based on document type

Sr. No.	Document Type	No. of Documents
1.	Article	120
2.	Book Chapter	49

3.	Conference Paper	28
4.	Review	20
5.	Book	5
6.	Note	3
7.	Letter	3
8.	Editorial	3
9.	Conference Review	1
	Total	232

4.2 Inclusion and Exclusion Criteria

The dataset retrieved from Scopus on NEP 2020 is small but constitutes a variety of document types; however, in this study, the investigators have utilized only two document types:articles and reviews due to the nonavailability of similar metadata in all document types, which are necessary for addressing the objectives of this study. The journal articles contain some important metadata like abstracts, author-provided keywords, and references that are missing in other document types, namely, book, book chapter, note, letter, and editorial. Conference papers are also excluded as they generally do not undergo the same level of rigorous peer review process as journal articles and reviews, and conference reviews do not contribute original research but are instead opinions and summaries. Hence, the present study is based on analysis performed on a total of 140 documents, consisting of 120 articles and 20 reviews.

4.3 Data Analysis and Visualization

The data analysis and visualization in the present study is performed utilizing MS-Excel, Biblioshiny package of Bibliometrix tool (Aria & Cuccurullo, 2017), and VOS viewer (Eck & Waltman, 2009).

5. Results and Discussion

The basic information about the final dataset (after the inclusion criteria) for the study is shown in Table 2. It is evident from Table 2 that dataset retrieved from Scopus, without application of filter or limit for timespan, has resulted in publications from year 2020 onwards, which is obvious as NEP is presented by the Government of India in year 2020. A total of 284 authors contributed 140 documents in 81 unique journals, which garnered 1.857 citations per document with an international co-authorship of 5% during the period of 2020-2024. The annual growth rate recorded during the period is 92.27%. A total of 44 single-authored documents were authored by 42 unique contributors.

Table 2 Basic Information about the Dataset of the Present Study

Timespan	2020:2024
Unique Journal Sources	81
No of Documents	140
Annual Growth Rate %	92.27
Document average age	1.34
Average Citations per doc	1.857
References	3850
DOCUMENT CONTENTS	
Author's Keywords (DE)	448
AUTHORS	
Authors	284
Authors of Single-authored docs	42
AUTHORS COLLABORATION	ON
Single-authored docs	44
Co-authors per Doc	2.18
International co-authorships %	5
DOCUMENT TYPES	
Article	120
Review	20

5.1 Annual Productivity and Citation Impact

Figure 1 illustrates that annual productivity (indicated by bar) on NEP has jumped from 3 documents in 2020 to 20 documents in 2021 and to 39 documents in 2022. A slightdecline to 37 documents is registered in 2023 but 2024, which is not over yet, has recorded an output of 41 documents till September 2024. On the note of citations (indicated by line) received by the documents, the year 2021 was the most impactful, registering 86 citations. The following year's citation line in the figure shows a dip despite the increase in publications. The possible reasons may be the lower age of the documents and shorter timespan to accumulate citations.

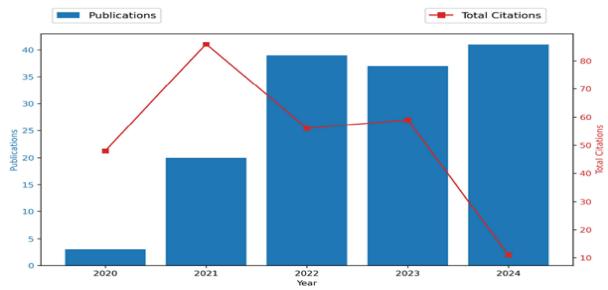


Figure 1 Annual Productivity and Citation Impact of NEP 2020 **Publications**

5.2 Subject Area of Publications on NEP, 2020

Figure 2 illustrates a pie chart presenting the subject-area-wise distribution of publications on NEP 2020. For this analysis, the investigators have utilized the subject area categorization provided by Scopus in its 'analyze' feature section. 55% of publications on NEP 2020 fall under the Social Science subject area, indicating that most of the publications may be focusing on social issues, policies, and implications of NEP 2020, followed by Economics, Econometrics, and Finance (11%), directing focus on the economic impact of NEP 2020. Engineering accounting for 11%, arts and humanities for 6%, and business management and accounting for 5%. This varied subject distribution represents an interdisciplinary interest in NEP 2020.

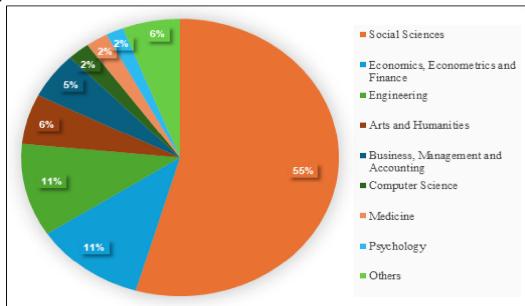


Figure 2 Subject-Area-wise Distribution of Publications on NEP 2020

5.3 Most Relevant Journal

The top 5 most relevant journal sources, shown in Figure 3, account for 51 publications, representing 36.42% of the total 81 journal sources with 140 publications. Journal of Engineering Education Transformations has published the most, with 22 studies, followed by Economic and Political Weekly with 18 studies, and Contemporary Education Dialogue published 5 studies.asian Journal of Legal Education and Higher Education for the Future eachcontributed 3 studies.

Additionally, this analysis underscores another important finding that out of 5 journal sources, 4 are particularly related to the education domain, indicating researchers' preference for journalsthat focus on education and education reforms.

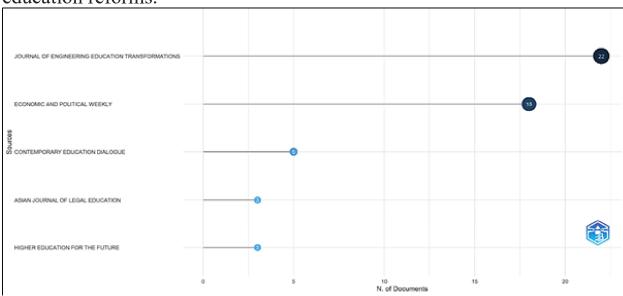


Figure 3 Top 5 Most Relevant Journal Source of Publications on NEP 2020

5.4 Most Prolific Authors

Table 3 shows the top 5 most prolific authors of publications on NEP 2020. The Pradeep Kumar Choudhury has contributed 4 studies from 2022 to 2024 in different journals and garnered a total of 9 citations. Amit Kumar, who co-authored 3 documents with Pradeep Kumar Choudhury, holds the second position as the most prolific author. Saumen Chattopadhyay, who published 2 studies in 2020 and 2022 and attracted 6 citations, respectively, holds the third position. Karina Bhatia Kakkar published 2 studies in 2022 and 2023, respectively, got 6 citations, and holds the fourth position. On fifth position, Shyam Singh Inda published 2 studies in 2021 and 2022, respectively, attracting 1 citation. The prolific author analysis also resulted in a total of 17 authors who contributed at least 2 publications. Another notable insight drawn from table 3 is that Economic and Political Weekly, a

journal, is commonamong the works of three authors and studies published in the year 2022 garnered more citations in comparison to others.

Table 3 Top 5 Most Prolific Authors of Publications on NEP 2020

Sr. No.	Author Name	ne Document Type Journal		Citations	
1.	Choudhury, Pradeep Kumar	Review (Choudhury et al., 2022)	Economic and Political Weekly	1	
		Article (Choudhury & Kumar, 2022)	International Journal of Child C are and Education Policy	6	
		Article (Choudhury et al., 2023)	Indian Journal of Human Development	2	
		Article (Choudhury & Mousumi, 2024)	Prospects	0	
2.	Kumar, Amit	Review (Choudhury et al., 2022)	Economic and Political Weekly	cal 1	
		Article (Choudhury & Kumar, 2022)	International Journal of Child C are and Education Policy	6	
		Article (Choudhury et al., 2023)	Indian Journal of Human Development	2	
3	Chattopadhyay, Saumen	Review (Chattopadhyay, 2020)	Economic and Political Weekly	0	
		Review (Chattopadhyay, 2022)	Economic and Political Weekly	6	
4	Kakkar, Karina Bhatia	Article (Singh & Kakkar, 2022)	Transnational Marketing Journal	1	
		Review (Singh & Kakkar, 2023)	International Journal of Educational Development	5	
5	Inda, Shyam Singh	Article (Sharma & Inda, 2021)	Purushartha	1	
		Article (Inda et al., 2022)	Purushartha	0	

5.5 Most Global Cited Documents

Table 4 shows the top 5 most cited documents on NEP 2020 during 2020 to 2024. The two most cited papers received more than 30 citations. Interestingly, all five most cited papers are articles in document type, and all are multi-author papers. The table analysis also shows that three out of five most cited documents are published in 2021, which correlate with the finding of Figure 1. All five studies are published in different journals in terms of field and focus, which indicates that NEP 2020 related publications are not limited to any specific field of journal publication and its implications and

impact are broad and relevant to multiple sectors such as education, policy, social sciences, and more. The insights drawn from this table also correlate to Figure 2.

Table 4 Top 5 Most Global Cited Documentson NEP 2020

Sr. No.	Authors Name	Document Type	Title	Journal	Citations
1	Kumar, Kishore; Prakash, ajai; Singh, Krishanveer	Article (Kumar et al., 2021)	How National Education Policy 2020 can be a lodestar to transform future generation in India	Journal of Public affairs	38
2	Kaurav, Rahul Pratap Singh; Suresh, K.G.; Narula, Sumit; Baber, Ruturaj	Article (Kaurav et al., 2020)	New education policy: qualitative (contents) analysis and Twitter mining (sentiment analysis)	Journal of Content, Community and Communication	31
3	Varma, arup; Patel, Parth; Prikshat, Verma; Hota, Deepak; Pereira, Vijay	Article (Varma et al., 2021)	India's new education policy: A case of indigenous ingenuity contributing to the global knowledge economy?	Journal of Knowledge Management	13
4	Jha, Praveen; Parvati, Pooja	Article (Jha & Parvati, 2020)	National education policy, 2020: Long on rhetoric and short on substance	Economic and Political Weekly	11
5	Saini, Munish; Singh, Madanjit; Kaur, Manpreet; Kaur, Manevpreet	Article (Saini et al., 2021)	analysing the tweets to examine the behavioural response of Indian citizens over the approval of national education policy 2020	International Journal of Educational Development	9

5.6 Most Prolific Affiliations

The chart in Figure 4 illustrates that Jawaharlal Nehru University and the University of Delhi are the leading contributors to research on NEP 2020, with 9 publications each. This highlights the substantial role central universities are playing in responding to and advancing research on NEP 2020. Additionally, private universities are making noteworthy contributions, with Christ (Deemed to be University), Karnataka, contributing 5 publications, and amity University, Uttar Pradesh, contributing 4 publications. Among state government universities, Guru Nanak Dev University, Punjab, has also made a significant impact with 4

publications.

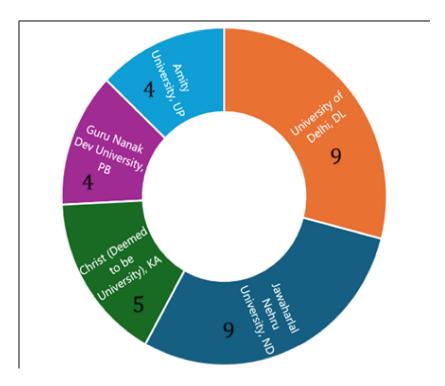


Figure 4 Sunburst Chart Depicting the Top 5 Most Prolific Affiliations Contributing to NEP 2020 Research

5.7 Co-Authorship Network Map

Tomap the co-authorship network, VOS viewer, A tool for constructing and visualizing Bibliometric networks, is utilized in the present study. To create the network, the minimum number of documents per author is set to one, which resulted in all 284 authors meeting the threshold. As shown in Figure 5, it was found that the largest connected component consists of only 6 authors (Ahmad Khanday Mudasir, Qayoom Shaista, Rajab Mudasir, Kamal Mustafa, Nahvi Iqra, Khan Tanveer ahmad). Which indicated that only these 6 authors are part of the largest connected component, meaning they have co-authored papers with each other. The rest of the 278 authors are unconnected, forming isolated nodes (or very small groups) that do not have direct or indirect co-authorship links with others.

The network indicates limited co-authorship collaboration on topics related to NEP 2020. This suggests that the research is fragmented, with individual authors or small groups working independently of one another.

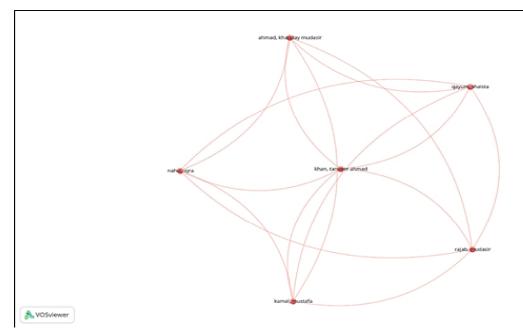


Figure 5 Co-authorship Network Map of Publications on NEP 2020

5.8 Co-occurrence Analysis of Author Provided Keywords

The co-occurrence analysis was conducted using author-provided on NEP 2020. The threshold for keyword inclusion was set to a minimum of 3 occurrences, resulting in 25 keywords out of a total of 448 meeting this criterion. of these, 23 keywords are connected, meaning they co-occur in multiple research publications.

The co-occurrence map shown in Figure 6 indicates that "higher education" is the most prominent keyword, indicating its central role in NEP 2020-related research. It has strong connections with other important keywords like "NEP 2020", "inclusive education", and "online education", reflecting a major focus on higher education reform, inclusivity, and the growing emphasis on digital education in the context of India's education policy changes. Another significant cluster includes "national education policy", "India", and "innovation", which suggests that many studies focus on how NEP 2020 affects broader education systems in India, including innovation and research.

In addition to these dominant themes, there are smaller clusters of related topics, such as "blended learning" and "pedagogy", which appear less frequently and are more peripheral to the main discussion. This highlights areas of research that may not yet be fully integrated into the broader conversation on NEP 2020. Furthermore, keywords like "multilingual education" and "MOOCs" are also part of the discussions around digital and inclusive education, reflecting evolving educational practices.

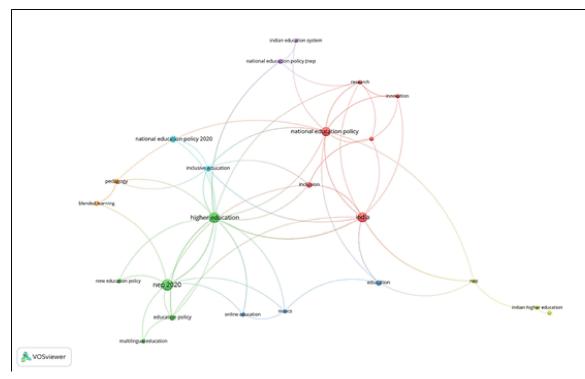


Figure 6 Co-occurrence Network Map of Author Provided Keywords in the Publications on NEP 2020

6. Conclusion

The present study, through a Bibliometric approach, attempts to map the scholarly discourse on National Education Policy (NEP) 2020. The study found that research on NEP is advancing and impactful. Academics from various subject areas are significantly contributing to the topic. However, the co-authorship pattern shows that academics prefer to publish individually or in a closed network group. No similarity is found in most prolific authors and authors of most globally cited documents, indicating that publishing a higher number of documents is not a criterion and enough to increase citations of publications. The total citations received by the most prolific author for 4 studies combined are 9, which is equal to the citations received by a single article on the fifth rank in most globally cited documents. The study highlights that except for the Economic and Political Weekly journal, no similarity is seen in the categories of most relevant journal, most prolific authors, and most globally cited document. The JNU and DU came out as the most contributing institutes on NEP 2020.

Additionally, the study reveals the research on NEP 2020 is fragmented, with individual authors or small groups working independently of one another. Overall, this study attempted to map the research output on NEP 2020 on a larger scale. However, the scope of further study is there considering bibliographic coupling and co-citation analysis, analysis of country collaboration, funding sponsor, and reassessing with different

databases, including other document types, which may result in new insights.

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