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COMPARING AND CONTRASTING INDIA'S NEP 2020 AND UNESCO'S EDUCATIONAL POLICY USING TEXT ANALYTICS

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Abstract

In the coming decade, India's ambition to become a developed nation will have to be fuelled and facilitated by the policies adopted by the government of India. These will in turn have social and economic impact. The National educational Policy (NEP) 2020 is a policy by the government of India which envisions development of inclusive and accessible education to the masses. This also aims to provide lifelong learning opportunities and processes by introducing flexibility into the previously rigid educational system in India. As part of the global educational ecosystem the NEP 2020 policy in India should also be looking at integrating the global educational policy guidelines. Which has changed from "Education for all to enrolment to learning that is inclusive, equitable, effective and relevant," as stated in the Sustainable Development Goal (SDG) 4 – Education 2030 Agenda, UNESCO (2017). All the member countries have agreed to integrate lifelong learning into their policies based on their national priorities which will have an impact beyond social and economic development and facilitate sustainable development. In this context this study compares the NEP 2020 policy document to UNESCO's Educational Policy which is an integration of the core concepts and targets of SDG4 using text analytics to identify the trends and to compare the same. The text analytics software used is KNIME which analysed both the documents to give a word cloud for each as well as a count of repetitive occurrence of keywords and collaborative occurrence of certain word sets in each of the documents which helped in the process of grouping and interpretation of the trends.

Keywords: NEP 2020, UNESCO, Educational Policy, SDG, Text analytics.

JEL: I210, I230, I290

1. Introduction

The social as well as economic development of a nation is intrinsically linked to its educational system. As this system creates the basic structure on which the development of the nation is built up. Overall National development is achieved through the changes in cultural, demographic, and social structure brought about by an

educational process which is inclusive and benefits each national. Sustainable national development achieved through quality education facilitates further advancements in technology, lifestyles and overall productivity of the people residing in the nation.

It is in this context that the National educational Policy 2020 (NEP) becomes much relevant to India. NEP 2020 is the fourth in line since Indian independence. The predecessor to the current NEP was released in 1968, 1986 and 1992, respectively. As one can surmise from the frequency of the previous ones the new NEP 2020 is envisioned to guide the further micro educational policies and decisions in India through a decade at the least. It is in this context that the comparison of this NEP 2020 policy document with the UNESCO's educational policies becomes relevant. Since it has to be the facilitator in India achieving Sustainable Development Goal 4 which is reflected in UNESCO's Education Strategy 2014-2021.

2. Literature Review

The process of Policy analysis has always faced lot of criticism over the methods used as well as the purpose. The initial mention of Policy analysis in the field of social science is when Lasswell et al (1951) used the term "policy orientation". This process of analysis can take either the form of analysis of the principles on which the policy is created so that it becomes analysis to build the policy or it can be the analysis of the proposed policy itself which leads to analysis of policy which was first put forth by Gordon et al (1977).

In the analysis of policies the following two methods are used-the determination and the effects due to the policy implementation can be analysed or the content of the policy can be reviewed to reveal the values and ideologies which has contributed to the same. Gordon et al (1977).

While looking at the evolution of policy analysis it can be noted that a policy was considered to be brought out for "public interest" the advantage of these policies for each individual depended on their own initiative and requirement. Renwick (1986) in his writing explains this as equitable distribution of common resources among all the stakeholders depending on their requirements. Which faced severe criticism from authors such as Shuker (1987) who argued that most of the policies benefitted only the affluent which had been initially analysed by Offe (1984) where he states that policies especially policies related with education etc becomes a failure as it benefits the capitalist class rather than the masses he further argues that it is due to the fact that the resources for running the state comes from the tax collected from the private accumulation of wealth which in turn is the result of capitalistic oriented production. The policies are made for public use and in order to provide the guidelines for the implementation and discussion of the policy the respective state brings out policy documents Codd (1985). Further down Codd (1988) while discussing the process of

policy content analysis or 'the content of policy documents' challenges the theory of language and suggests an alternative in which the analysis of the policy document should look at deconstructing text so that the embedded ideology can be analysed to give a better picture of the policy document content and intention. The discussion by Hoppe, Peterse (1993) suggest that the argumentative method in policy analysis will be the way forward where a forensic analysis of the document as well as participatory analysis will take the central stage.

In their work Schouwstra, Ellman, (2006) uses the extended Geelhoed-Schouwstra framework to analyse the Mongolian agricultural policy, an international policy and also a comparison between countries which they believe will contribute to policy design as well as analysis and will align the different global policies for a common cause. This accounts for the differences which surfaces between the result of an implemented policy and the policy intention. The discussions on policy analysis in research predominantly looks at providing guidelines for measuring the effect of the policy with respect to certain problems faced and the impact of the policy guidelines and proposals on the same from the public source of data available. Milovanovitch, (2018), Wildavsky (1979), Colebatch (2005), Walker (2000), CDC (2013).

Aithal, Aithal, (2019) compares the draft NEP 2019 with the Sustainable Development Goal 4 which promises sustainable education for all. Further in their study on the comparison of NEP2020 with NEP 1986 Aithal, Aithal, (2020) mentions that in comparison with the previous policy the current NEP 2020 would be enabling multidisciplinary and cross disciplinary studies as well as interactions and in the higher educational system which will be much more transparent and also the integration of research and innovation into the undergraduate level education. They also discuss the roadblocks which arise in the implementation policy due to certain existing conditions. Their comprehensive view of the policy appreciates it as a student centric policy with autonomy at all levels. According to Nigam et. al. (2020) currently the higher educational sector in India faces challenges in meeting the demands placed on it due to ever increasing population which effects the quality of the same and there by effects the global ranking. This drop in the global ranking leads to brain drain in which many young Indians are migrating to other continents to pursue their research interests which further brings the down the quality.

In the review of the NEP 2020 Mathew (2020) discusses the advantages and disadvantages of the policy – a single regulator for higher educational system, suggests a three-language system, multiple entry and exit option, credit bank etc as the major advantages.

Tarozzi., Inguaggiato., (2016) in their report compares the educational policy of 10 European countries on global citizenship education.(GCE)It refers to the policy document synopsis of these countries and has done a thematic analysis to bring out the

presence of GCE in primary education. The countries under the study were UK, Latvia, Austria, France, Spain, Czech Republic, Bulgaria, Italy, Portugal and Ireland. In the comparative analysis they found that even though the choice of words were different the intention and the topics were the same. The report mainly analysed four factors that is the key players, terms used and concepts, the implementation of the concept in schools, main hurdles faced during policy implementation. The terms and concepts in each policy document was conducted through qualitative data analysis software NVivo to bring out the main themes.

Nagel, (2017) analyses the gender equality plan in the UNESCO strategy document 2014-2021, the analysis looks at the background of the policy then moves on to analyse the components of the policy expected outcomes, objectives and methodology for implementation and also took into account sustainability and strength of the policy. Finally, the overall policy objective fit into the broader objectives of UNESCO was also examined. The study finds clear connection between UNESCO's overall strategy and the policy objectives. It also suggests further policies should give emphasis to the role of stake holders and evaluation of the fulfillment of objectives.

Since the beginning of policy making, we can see that the policy makers objectives are hinged on creating a new future not as much on the analysis of the effectiveness of the old policies and the perspectives arising out of this analysis. Mosse, (2004). It is in this context that a comparison of the policy document of NEP2020 which will guide the educational infrastructure for the next decade should be compared to the global Sustainable Education Strategy embodied in the UNESCO Education Strategy 2014-2021 becomes relevant.

Analysis of text as data is finding favour in social science research as especially with the prevalent use of internet and the evolution of complex tools for text analysis as it has been the major source of data in social sciences Golder & Macy. (2014). Evans, Aceves (2016) in their study recognises the use of text analysis as major tool in facilitation of application of existing theories to the quantum of data mined from the text, as well as to identify the new trends emerging from the text analysis. In classical content analysis the text as data method was initially used Krippendorff (2004), but in political studies it was applied to conflict studies. Gerner et. al. (1994)

3. Research Objective

As identified from the literature review, we can see that majority of the policy analysis takes place in order to study the effectiveness in the implementation of the policy and very few studies conduct a comparative analysis between the policies. This study proposes to compare the Indian NEP 2020 with UNESCO's Educational Strategy 2014-2021 using text analytics to identify the commonalities and contrasts.

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5.2 Text Analysis of UNESCO Policy on Education

UNESCO Education Strategy (2014–2021) was subjected to similar analysis and the resulting clusters and corresponding key words are Vision, Concern for Weak and poor, objectives, process and delivery, stakeholders, sectors, and types of education.

The first factor, namely the vision is brought out by key words, such as, development, sustainable, inclusive, empowering, regional, economic, growth, unemployment, and 21st Century. The overall vision is to empower the citizens through education and achieve an inclusive and sustainable growth. Education is a foundation for human fulfillment, peace, sustainable development, economic growth, decent work, gender equality and responsible global citizenship.



Figure - 2
Word Cloud - UNESCO's Educational Policy

The next factor is about concern for the weak and the poor. As this policy flows out of the Millennium Development Goals (MDG) 2 and 3 that are concerned with a) Achieve Universal Primary Education and b) Promote Gender Equality and Empower Women. This factor basically brings out the essence of filling unfinished MDG 2 and 3, through keywords disadvantaged, advocacy, sexuality, Discrimination, inclusion/Equity, poverty, marginalized, parity, poor, reach, disparities, environmental, children, gender, girls / women, access and EFA (Education for All).

The next factor is about objectives or what education is expected to achieve. The word lifelong learning appears in 41 times. Global perspective is other key term that appears in many places of the document. Other keywords are outcome, leadership, quality, holistic, Values, skills, knowledge, competencies, innovation / Creative, collaboration, multilateral, numeracy, problem-solving and innovative. Education has to be holistic and is expected to give skills, knowledge and competencies that will make them innovative and also good at problem solving. The quality education should also impart leadership skills.

Then comes the process and delivery of education. The key words in this factor are evidence-based, curricula, ICT, technology, dialogue, foundation, research, assessments, evaluation, teaching, Monitoring, and publication. Use of ICT (Information and communication technology) for effective delivery of education has been highlighted in several places. Emphasis is placed on evidence-based research and publications. It also talks about teaching and assessment.

The stakeholders and the need for a dialogue with all of them in formulating the education policies are emphasized in this factor. The stakeholders that find a mention here are societies, community, Organizations, sector-wide, teachers, institutes, and donors.

The last factor is about the sectors and the types of education. There is a special mention of health, social and food sectors. There is dire need to strengthen these sectors. Additionally, it talks about unification of different forms of education, such as formal, non-formal, continuing, and vocational education. There is special emphasis given to TVET (Technical and Vocational Education and Training) which is seen as a crucial vehicle for social equity, inclusion, and sustainable development. TVET provides skills for employment through formal, non-formal and informal education.

5.3 NEP2020 vs. UNESCO – An Analysis

When comparing the two documents based on text analytics we can observe that there are some common clusters like Vision, Objectives, Process, Components, Sectors and Stakeholders which are common to both the documents. Other than these six clusters there are two more in the case of NEP 2020 and one in the case of UNESCO's Educational Policy which are unique to the documents.

While analysing the vision cluster we can see that the most weighed factors in NEP are Development and National while Development along with sustainability carries significant weight in UNESCO's Policy this could be due to the fact that Indian policy has to comprehensively look at the catering to the whole nation as an entity even though separated by many barriers that the sustainability element have not been given due importance in comparison to the nationality factor and employment factor.

In the Objectives cluster NEP factors are Multidisciplinary/holistic, autonomy and flexibility, while UNESCO document looks at Global /International, quality, skills, Lifelong learning, Knowledge, Innovation and creativeness here it can be observed that UNESCO being a world organisation has a global perspective which emphasizes on quality skills and lifelong learning. The Indian objective is also to facilitate lifelong learning for which they are looking at autonomous structures as well as flexibility to make education accessible and inclusive.

The two clusters in NEP - Process and components are considered together in UNESCO Policy which might be due to the overlap of many a component in these grouping. While in the NEP policy the processes are defined to provide necessary framework for execution, the main factors considered are assessment, pedagogy and innovativeness and creativeness. And the component cluster contains Vocational skills, Online and digital culturally rooted, Art Literature, Technology, Ethical and Sanskrit. The UNESCO process and component cluster contains Teaching, ICT, Monitoring, Technology, Foundation, Research. In comparison we can see that the UNESCO document emphasizes on the teaching aspect of the process while pedagogy and assessment also carries weightage in NEP. The other prominent factor in the NEP is Online /digital and Technology which has much weightage in NEP but not so in UNESCO this could be due to the fact that India is in the process of technological growth and has a long way to go before it catches up with other developed nations. Historical/ Culturally rooted, Art, Ethics as well as Sanskrit are also important factors in the NEP while it is not reflected in the UNESCO document; this can be attributed to the NEP building up the educational processes rooted in the rich cultural and historical elements present in the social weave of Indian society. Which if capitalized and channeled through the educational system will orient the whole society towards an ethical and sustainable one.

The Stakeholder cluster has similar factors in both the documents with communities as the main factor and Teachers constitute one of the main factors. Institutions in the UNESCO document is defined in the NEP as Philanthropic and Private since in India the government educational machinery even though a very efficient and effective one would not be able to attain the objectives of the policy due to the sheer size and diverse needs of India as a nation.

The next common cluster for both the documents is the different sectors in which most of the factors are common – which are health, social, Adult/ Education etc. The one factor which is of repeated occurrence in the UNESCO document is Vocational which has high weightage in NEP document in the Component cluster as Vocational Skills. This could be due to the necessity of inclusion of Vocational skill development as an integral component in the Indian educational system in order to realize the vision component of employability. The vocational educational in the global context is just another important factor which is considered along other sectors. Another factor which is of importance in this cluster in NEP is Agriculture which is of utmost importance to India where huge tracts of land is under agricultural production and more than one third of the population is involved in the agricultural and associated activities.

The one cluster in UNESCO which does not have a direct parallel in the NEP document is the Concern for Weak and Poor in which the most important factors are Education for all, Children, Women, Gender, Access, and Inclusion. Even though there isn't a separate cluster similar to this in NEP when we examine the word cloud generated for the NEP document we can see the size and depth of color for the term

disadvantaged which in India includes most of the factors which have been clustered under this topic.

The two unique clusters which is unique to NEP without any parallel in the UNESCO policy is Regulators and Concerns.

In the Regulator cluster factors like the Governing Bodies/Regulatory Bodies and Accreditation as the main factors. This is due to the fact that globally the quality of the educational institutions is driven by the economic principle of demand and supply, whereas in India the demand due to large population is high which leads to acceptance of substandard quality. In order to ensure quality education, the presence of regulatory bodies as well as guidelines for functioning of an educational institution which results in the awarding of accreditation becomes important. This is the background which gives rise to the Regulatory cluster in NEP.

The other important cluster is the Concerns cluster which has Linguistic / Metalinguistic, Disabilities / Dropout, Inclusive, Disadvantaged etc. This cluster is unique to each nation and cannot have parallel in the UNESCO document. In spite of that certain factors included in this cluster like Inclusiveness, Disadvantaged etc has been mentioned in the Concern for Weak and Poor cluster of UNESCO document. India due to its vastness and multilingualism faces multiple hurdles in rolling out an educational system which gives uniform opportunity to all its citizens. This cluster reflects upon those roadblocks which need to be tackled.

6. Conclusion

When we consider compare the text analytics and the topics generated for NEP 2020 and UNESCO's Educational Policy, we can see that they have the same outlook and objective. NEP has been primarily built of the principles of UNESCO. The idea of integrating vocational education into all forms of education and breaking of hard separators between different forms of education seem to flow from UNESCO. Lifelong learning and holistic education too are common between the two policies.

The NEP has also drawn upon and leveraged the historic, artistic, and Cultural heritage of India to define the components of the Policy. So that these are not lost in the adaptation of the structured western educational system. The major concerns in the process of execution are also brought to notice in the NEP policy so that the policy makers have factored in the risks and are integrating it into the framework so that the executional agencies and regulatory agencies would be aware of the same from the beginning.

The major difference between the two is in terms of the regulations and controls that NEP has elaborated in its policy document. UNESCO document has not looked at how education should be regulated by different nations. The idea of 'light but tight'

regulation proposed in NEP is not in alignment with most other developed nations which rely on market and peer regulations to monitor the quality of education. While NEP 2020 has drawn heavily from UNESCO's Educational Policy it has been tweaked to suit the specific needs of Indian society.

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