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NEP: An Indian Ethos

The National Education Policy (NEP) proclaims “Curriculum and pedagogy will be transformed by 2022 in order to minimise rote learning and instead encourage holistic development and 21st-century skills such as critical thinking, creativity, scientific temper, communication, collaboration, multilingualism, problem-solving, ethics, social responsibility, and digital literacy.” These attributes in a policy that kept the country waiting for more than three decades are most welcome. Certainly, a good attempt to collate all required skills. Learning pedagogies and assessment methodologies gestate long before changing. Six long years of work in progress has culminated in some worthy suggestions and some concerns. The increased stress on investments in education and skill development especially after they saw a downward slide in the last four years, is both welcome and much needed in a country with more than 60% population below 30 years of age.

That the document steers clear of epithets like “Socialism and Secularism which were a part of earlier education policies is a step in the right direction. Education policies must handhold long term economic policies in the country. This policy attempts to set economic directions through the delivery of education, for “Atmanirbarata” that the PM spoke about. Sustainability and stability of economic reforms associated with governments adhering to socialism of the 21st century have been constantly questioned. Haven’t we seen the Bolivarian government of Venezuela almost collapse due to their economic policies that led to shortages in Venezuela, a high inflation rate and a dysfunctional economy? Though Socialism believes that the means of making, moving, and trading wealth should be owned or controlled by the workers and that everything in society is made by the cooperative efforts of the people and citizens, its imprint within a globalised world was never sought to be changed and remained dogmatic. On the other hand, the principle of separation of the state from religious institutions is often treated as secularism. Its interpretation has always been to meet political ends. In today’s context, Pluralism or the “doctrine of multiplicity” in logic could be a better way to define our existence. The Education policy does well to establish the Indian ethos.

The Country needs an equitable education to serve all kinds of disparity whether, caste, class, religion, gender or disability-based especially in the aftermath of a drop in the functioning of Sarva Shiksha Abhiyan and Rashtriya Madhyamik Shiksha Abhiyan, by 31% and 71% respectively in 2017. One important parameter that defines equity is curriculum. NCERT and SCERT would do well to address all concerns past, present and future irrespective and in spite of the right or left inclined critics. That the Policy envisages a 6% GDP for education augurs well for the objectives set.

In a Country where a premium is attached to education by every family, rich or poor, the NEP signals setting up new schools and establishment and merging of new institutions, an idea worth exploring. Replacing the UGC by a Higher Education Commission of India (HECI) is a much-needed reform that can promote greater autonomy and focus on better academic outcomes with facilitating and enabling provisions.

The NEP correctly though a little ambitious, lays stress on a 100% and 50% enrolment at the primary and Higher education respectively. Massive funding is needed to realise these goals. One suspects, the recommendations seem to rely more on hope than experience.

The recommendation to change the structure of the school with a start from 3 years of age, merging 9-12 standards into a possible 8-semester framework, replacing current assessment with application-based assessment pattern, creating new School Complexes and Special Educational Zones for backward areas is a radical and brave idea. Including preschool with government school system will provide infra and logistic challenges and free control suggestion in private schools can pose legal challenges. Revamping under-graduate education with multiple entry and exit options is innovative. However, it requires the employment markets to be equally dynamic. A recommendation separating the regulation of schools from aspects such as policymaking, school operations, and academic development and recommendation of creating an independent State School Regulatory Authority in each state prescribing basic uniform standards for public and private schools may bring about logistics challenges.

The policy talks of teaching in local language ‘Wherever possible’. A great idea to preserve the Indian languages. However, the government schools operating under state boards teach only in local language. It is the private schools that rose to cater to the aspirations of parents and students and started English medium schools. And so, students moved from government schools to private schools. Reversing this paradigm is fraught with legal challenges besides a need for political acumen.

The NEP suggests a multi-disciplinary higher education system and a simplified university system, to emphasise on professional, humanities and pure science streams. Phasing out complex nomenclature such as ‘deemed to be university’, ‘affiliating university’, ‘unitary university’ and retain only terms as public, private, or private-aided is much needed. Pitching for multidisciplinary research universities or comprehensive teaching universities appears rational, though a debate of a teaching institute that also does research or a research institute that also does teaching will go on for ever, whatever be the recommendation. **Any regimentation of education can only be counterproductive.**

One major disconnect of Indian Universities has been the research quotient of our universities and disconnect with the industry. Research without patents and IPR’s is a cause for concern. Innovation, variously understood has always been on the side-lines. The NEP’s recommendation of a new authority, the National Research Foundation (NRF) though a good idea, could be limited in effectiveness, given that Higher education financing agency (HEFA) also has similar functions.

A National Mission on Education through ICT to enable virtual laboratories to provide remote access to laboratories in various disciplines will certainly prove useful but in itself cannot substitute the real. Blended learning instead of disaggregated distance or online learning paradigms would have added value.

Any policy must connect education with available opportunities of employment. The employment opportunities too must grow many times. Programs that allow for this exposure and provide students with tangible outcomes must be started in every district and every village. The NEP is fairly impressive in setting a future direction. However, the centre must ensure that the policy does not face litigation, state resistance, and operational challenges hitting the ground for the road to success and the road to failure are almost exactly the same.

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NEP: An implementation Perspective

NEP aims to transform the intent and content of education sector, said our PM. There is nothing to fault on the intent. However, content needs implementation, a real challenge. All challenges have intrinsic opportunities. Learning how corporations have unlocked value through stressed times may be useful.

Most of them matched their structures to their strategies in the modern business history. Whereas 19th Century was mass production by centralizing key functions like operations, sales, and finance, these firms diversified offerings and moved into new regions a few decades later. Corporations such as General Motors and DuPont created business units structured around products and geographic markets. The smaller business units sacrificed turnovers for flexibility and adaptability. Similar models emerged in education as well. How does NEP help?

Centralized by function versus relatively decentralized by courses and region will prove durable for a long time, largely because the evolution of education is incremental. Indeed, a conventional straight jacketed education structure remained the dominant model for almost 70 years. It did push the GER in the upwards of 25 but fell short of growing aspirations of a country on the move. As competition intensified, problems with both models became apparent, in education as in companies, as both searched for new ways to organize themselves to unlock value. Innovative thinking and execution are needed if a GER of 50 is to be reached.

A strong business process reengineering model, is needed if the objectives of NEP have to become real. The new model must organize around its various processes, using technology, instead of its traditional functional, faculty centric courses, and geographic boundaries. Multiple process-focused disciplines will have problems coordinating and aligning activities, whereas a silo is a silo whether it is an education process, a function, or a specialisation.

More recently, we've been hearing about "virtual" and "networked" institutions operating across traditional boundaries. We will need "Velcro Institutions" in spirit, where they must be capable of being pulled apart and reassembled in new ways to respond to changing opportunities. Setting up Online/Blended and Virtual Universities would add meat to NEP and the 50GER wish. Massification of National Skills Qualification Framework (NSQF) and institutionalising it within the education system will add competency-based skills to the young hands and respect to their minds. Virtual Laboratories and simulations add value but cannot replace the real.

The opportunities and challenges that globalization affords must make us revisit many assumptions about the control and management of both the student learning paradigms and the structures in which they happen. Today's computer company, for example, can manufacture components in China, assemble them in Mexico, ship them to Europe, and service the purchasers from call centres in India. This dispersal creates demands for new learning models to align internal and outsourced credits within our institutions and those around the world. A Credit Bank concept provides hitherto unthinkable opportunities for not only reaching education to the unreached but even allow them build corporatized degrees.

Imagine a complete personalised learning pursuit. A Physics course from Punjab University, Mathematics from TIFR, Chemistry from IISc, an Astronomy course from Aryabhata Research Institute of Observational Sciences and a course in AI from IIT Hyderabad leading

to a career in Astro Physics all enabled by a Virtual University. Even modern-day skills could be built as value addition to rising in the corporate ladder, besides meaningful certifications.

Imagine improving Business skills with a course in Agile Management from Martin Kropp University, a leadership primer from Texas Tech University, or our very own IIM Kozhikode, or improving technical skills with courses in Data Structures and Algorithms from University of California or learning Data Skills with courses in Python, Machine Learning and Big data from the IIT's. The implementation strategy is to provide a Virtual University environment where all Universities in India become collaborators, creating their own or sourcing content from Coursera or EdX or Udemy like providers. Like the PM said, NEP can ensure that students become global citizens while remaining connected to their roots. The focus is integrating local with Global. This will even make the youth future ready while focussing on National goals.

The new (3+2) +3+4 school curriculum with 12 years of schooling replacing the existing 10+2+3 to graduation can shift the burden of school bag to the boon of learning. However, this necessitates a change in curriculum outcomes shifting the focus from “what to think” to “how to think”. Traditional learning must transform from memory skills to thinking skills. Experiential learning and Flipped class room models must be seamlessly built into the curriculum. Speaking about schools, it is imperative to convert all primary schools to secondary level and improve their infrastructure. Examination systems must transform from end semester or end year to continuous evaluation.

NEP envisages empowerment of Higher education institutions through autonomy. Today the Institutions have to work under a multitude of Regulations and Regulators and have no autonomy. That both will give way to a single agency may be welcome, though the individual needs of Technical Education and others must not be sacrificed at the altar. However, autonomy to decide the admission procedure, fee structure and curriculum must not promote commercialisation.

Is complete autonomy a myth? If the Vice Chancellor is a towering personality and a leader par excellence, he creates his own space and leads from the front and then Autonomy thrives. Even the faculty will need to be trained differently and calls for new-age skills training. But, is it really feasible to provide autonomy to say five hundred institutions in each of the States and ensure a standard set of do's and don'ts? Their performance must strictly be subject to Quality Assurance. The current provision of a university alone conferring a Degree or a Diploma, must be modified to include all Autonomous Colleges to do the honours.

Our universities must be modelled on Max Planck for Basic research and Fraunhofer-Gesellschaft Institutes for applied research with a focus on Productisation. The focus must shift from merely publishing papers. That alone can make “Start-up” and “Make in India” initiatives come alive with new markets and employment opportunities.

The future universities must be places, which coexist with the industry and become large multi-product, multi-process and multifunctional businesses. Industry too must be allowed to setup Institutions under section 25. Apart from a share in GDP they would share a perspective. They must collaborate on projects that solve real-world problems. NEP can make us Atmanirbhar, provided we let it.