

How NEP can transform higher education in India

India today has over 1,000 Higher Educational Institutions (HEIs), including over 150 of national importance. Over the years, it has also become a hub of scientific research.

HEIs have shown a consistent growth in both the quality and the quantity of research in the past decade. India currently ranks third globally in terms of the total research output, accounting for 5.31% of the total of research publications. Of three aspects — education, knowledge generation (research and development) and innovation — Indian HEIs have performed very well, in relative terms, in the first two aspects, but lack on the innovation front.

It is striking that universities in the United States (US), in the early 19th century, were in a similar state. Just as Indian research primarily follows on the research taking place in the West today, US universities in the 19th century were primarily following the well-established universities in Germany and the United Kingdom, which were considered pioneers at that time for research in natural sciences, religion and theology.

The watershed moment for US universities was the introduction of Morrill Act in 1862 when land-grant universities were allowed to be set up that focused on local requirements. Most leading US universities of today were set up as land-grant universities and achieved their eminence by focusing on finding solutions to the problems faced by society.

India found its Morrill moment with the approval of New Education Policy (NEP) exactly a year ago, on July 29, 2020. NEP is expected to transform the landscape of higher education in India by making HEIs work on “solutions to the problems” rather than “solutions looking for a problem” in the following specific ways.

One, Indian academia has traditionally been focused on R&D without much emphasis on relevance and delivery. The establishment of the National Research Foundation (NRF) is expected to connect our academia with ministries and industry and fund research that is relevant to local needs. Under the framework of NRF, each government ministry, be it central or state, is expected to allocate separate funds for research.

NRF, therefore, is expected to pose well-defined problems to the researchers, so that

they can find solutions in a goal-oriented and timebound manner. Indian institutions have the potential to do so, whether it is Defence Research and Development Organisation (DRDO), Indian Space Research Organisation (Isro) or Department of Atomic Energy (DAE), as they have done in the last few years, or our HEIs during the pandemic. For example, during the Covid-19 pandemic, researchers at Indian Institute of Technology (IIT)-Delhi focused on problems related to virus detection, protection and treatment, launched the world's most affordable RT-PCR and antigen-based testing kits and developed export-quality personal protective equipment (PPEs) through the startup ecosystem. Covid-19 technologies developed at IIT-Delhi have touched over 10 million people and helped the nation fight the pandemic.

Two, in order to unleash the technology development potential of HEIs, our institutions need to not only become multi-disciplinary in their scope and offerings, but also collaborate among themselves. Bringing “unlike” minds together in terms of disciplines (multi-disciplinary schools and centres), cultures (international programmes) and attitudes (academia-industry collaborations) is the need of the hour. This is required for unleashing the creative potential of researchers at our diversified set of HEIs. With its emphasis on multi-disciplinary universities, NEP rightly emphasises this aspect.

Three, with the goal of increasing the gross enrollment ratio (GER) from the current 26% to 50% by 2035, India needs to not only open new HEIs and universities but also scale-up existing HEIs. This massive expansion will not only require additional financial resources but also calls for a new governance model. It is no coincidence that NEP speaks of achieving graded autonomy for HEIs. Over time, independent boards will manage the HEIs with active participation from alumni and experts from academia, research and industry.

Four, NEP is expected to bring in significant funding. For higher education, for the first time, government promises a budget allocation for education as a fixed percentage of Gross Domestic Product at 6%. This will be a game changer for HEIs.

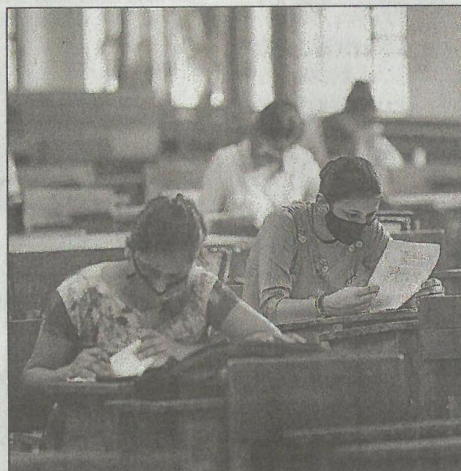
And finally, under NEP 2020, Indian HEIs will focus on 3Is — interdisciplinary research, industry connect and internationalisation, the three pillars needed to elevate our institutions to global standards.

Until now, Indian HEIs lacked international diversity and remained predominantly local; they hired only Indian faculty and trained only domestic talent. The lack of international faculty and students in Indian elite institutions is one reason for the poor rankings of Indian institutions. NEP has enabled mechanisms for Indian HEIs, such as IITs, to venture out and open international campuses across the world. This will not only increase their international footprint but also improve their perception globally.

Indian academia welcomed NEP and embraced it with enthusiasm when it was launched. In the past year, institutions have also taken concrete steps for the implementation of NEP. The results will be visible soon.



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The views expressed are personal