Innovative curriculum design and evaluation for achieving diversity, equity and inclusion in the Indian higher education system

Arindam Chakrabarty and Anil Kumar Singh
Department of Management, Rajiv Gandhi University, Doimukh, India

Received 16 December 2022
Revised 29 January 2023
Accepted 29 January 2023

Abstract

Purpose – India has been withstanding increasing pressure of enrolment in the higher education system, resulting in the creation of new universities in consonance with the recommendations of the Knowledge Commission (2007). Barring a few institutions of paramount excellence, the mushrooming universities fail to conform to equitability of quality and standards, that is teaching-learning-dissemination and research, except for accommodating higher gross enrolment ratio. It has resulted in an asymmetric and sporadic development of human resources, leaving a large basket of learners out of the pursuit for aspiring higher academic, research and professional enrichment. The country needs to develop an innovative common minimum curriculum and evaluation framework, keeping in view the trinity of diversity, equity and inclusion (DEI) across the Indian higher education system to deliver human resources with equitable knowledge, skill and intellectual acumen.

Design/methodology/approach – The paper has been developed using secondary information.

Findings – The manuscript has developed an innovative teaching-learning framework that would ensure every Indian HEI to follow a common minimum curriculum and partial common national evaluation system so that the learners across the country would enjoy the essence of equivalence.

Originality/value – This research has designed a comprehensive model to integrate the spirit of the "DEI" value proposition in developing curriculum and gearing common evaluation. This would enable the country to reinforce the spirit of social equity and the capacity to utilise resources with equitability and perpetuity.

Keywords Strategic reforms, Higher education system, Innovative curriculum design and evaluation, Diversity-equity-inclusion, India

Paper type Research paper

Introduction

As a transforming economy, India has emerged as a global superpower. The country is enormously and consistently progressing in the education sector, particularly in terms of enrolment and the degree of penetration in the spirit of inclusive growth. Advancements in education and technology have been globally accepted as promising vehicles for economic growth and sustainable development. Accommodating a high influx of population into the higher education (HE) system has been a severe challenge faced by the country as the HE ecosystem is predominantly supported by the central government. Due to the varying socioeconomic disparity in the country, it would be difficult for an ordinary citizen to enrol in any undergraduate, postgraduate or research programme unless the states contribute their share to the HE system. The operating costs of higher education have gone exorbitantly high

Journal of Research in Innovative Teaching & Learning
Emerald Publishing Limited
2397-7604
DOI 10.1108/JRIT-12-2022-0084

in recent times, and the gestation period is too long before it may deliver dividends back to the economy.

India is predominantly a union of states where democratically elected governments rule at local, state and union levels. Education in India comes under the *Concurrent List* of the constitution. The provincial and union governments work together in the spirit of cooperative federalism. However, the state governments must play a significant role in educating vast and remote populations within their respective jurisdictions. The *Knowledge Commission Report* recommended that India have around 1,500 universities to achieve a gross enrolment ratio (GER) of 15% by 2015 (National Knowledge Commission, 2007). However, Prof. J. B. G. Tilak, former professor and vice-chancellor of the National University of Educational Planning & Administration, and currently ICSSR National Fellow & Distinguished Professor at the Council for Social Development, New Delhi, questioned the rationality of the analysis and the aspirational number of universities suggested in the report (Tilak, 2007). According to his publication, the qualitative aspects of higher education in India were ignored and focused on the substantial number of universities alone.

Several HEIs are being established through private initiatives and the public-private partnership (PPP) model. At times, creating universities appears to be merely a political fantasy or an aspiration, not a need-based state priority. As a result, new universities are created with barely any vision or commitment towards achieving excellence. Instead of consolidating the existing universities, the political executives are focused more on setting up new institutions for popularity gimmicks and retaining mass support. Despite being autonomous by the Acts of Parliament, universities are often dictated by some visible and non-visible power blocks.

The varsities are suffering from a shortage of funds and other resources, compelling them to compromise with the teaching-learning dissemination process. All these eventualities constrain the universities either to compromise on the syllabus content and curriculum or use shortcuts in the dissemination process. Consequently, India is producing incremental graduates and postgraduates in consonance with the economy's demand, but most are not employable (BI India Bureau, 2020; India Today Web Desk, 2019a). As a result, the country is creating a large band of university graduates and certified human resources who miserably fail to be absorbed in any form of economic activities of national interest. Such disparity has resulted in many applications by the postgraduates and doctorates, even for unskilled positions (Kumar, 2020; Shukla, 2022). To make matters worse, the creamy layer of students from excellent institutions are migrating to foreign countries, resulting in brain-drain from India. On the other hand, many graduates and postgraduates are left jobless as they are unemployable in the economy and industry (India Today Web Desk, 2019b).

This paper has been conceived to understand all these perennial issues, such as the ease of equitability of curricula, its inherent challenges in the Indian academia and how all these problems can be addressed by devising an implementable model.

Literature review

The idea of a common curriculum and syllabi across the HEIs in India is not new. In a federal autonomous HE system, the idea of a common curriculum appears to be rigid, mechanistic, and unwanted state intervention on the autonomous character of the institutions. Regional aspirations and numerous political affiliations dominate the policy-making process in the country. Due to geographic and demographic differences, generating a consensus between the state and central governments is often challenging. Even though subsequent governments might have thought of formulating and implementing the HE dissemination process through a common platform, historically nothing has cropped up. During 2001–2002, the central government took the initiative to prepare a model code of curriculum and prepared

a syllabus for each PG programme with UGC-approved nomenclature (University Grants Commission, 2001). The universities across the country either directly adopted the model curriculum or framed syllabi keeping the model curriculum as the guiding principle. But it was never made compulsory since the universities have their aspirations and essence of autonomy while preparing their curriculum or syllabi.

The Government of India (GoI) initiated the "Restructuring of Curriculum in Higher Education" in 2016 (Press Information Bureau, 2016). The HE learners across the country can now study choice-based, choice-driven, skill-based papers along with their core area so that the skill gap can be bridged and the passing-out graduates can become more employable in the economy. However, the common curriculum was only for the "Choice Based Credit System (CBCS)" papers and not on the core course structure. Later, a skill gap study conducted by National Skill Development Corporation projected that around 110 million workforces would be required by the end of 2022 in the identified 24 key sectors in India (National Skill Development Corporation, 2020).

India witnessed a steady reform from a "*model syllabi*" system to a "*common curriculum*" on a minuscule portion of each program of study. The recent skill gap report identifies that the skill deficit amongst Indian graduates has not been appropriately addressed. Instead, the skill gap is widening in certain areas (Wheebox, 2022). For instance, the employability of Industrial Training Institutes (ITIs) pass-outs has lowered from 40.90% in 2016 to 31.30% in 2022, and that of the diploma holders' employability has increased only marginally from 15.89% in 2016 to 21.42% in 2022. It is also evident that Banking and Financial Services and Insurance (BFSI) sector has been mainly hiring during 2018–2022, along with software and hardware IT and IT enabled services (ITeS) sector. The detailed industry-specific hiring phenomena during this period (2015–2022) are illustrated in Figure 1.

The All India Council for Technical Education (AICTE), being the nodal council for technical and allied education research in India, initiated the formulation of a model curriculum for undergraduate technical courses across the country. With the advent and adoption of the New Education Policy (NEP) 2020, it is understood that the education scenario in the country must be directed towards achieving the *Learning Outcome Based Curriculum Framework (LOCF)*. Achievement of LOCF is aspired with a focus on other thrust areas like gender equality, ecology and environment, and ethics. With the high private participation in technical education, it is becoming challenging to frame appropriate LOCF by every institution to adopt and honour the spirit of NEP 2020. In response to the emerging challenges, AICTE revamped its curriculum in accordance with NEP 2020, which can be directly adopted or can become a benchmark for many other institutions. This framework by the AICTE has been prepared in consultation with experts from academia and industry so that the identified skill gaps can further be transformed into skill superiority following the need of the hour.

From the indicative review of the literature, it is understood that there are manifold deviations in the quality of academic outcomes, placements and market acceptance of the pass-outs across different HEIs in India. It is observed that the best of the Indian educational institutions and other lower-ranked institutions have wide dispersions on various attributes in the NAAC or the NIRF evaluation system. From these indications, it can be interpreted that some of the Indian institutions either fail to provide adequate instruments of curricula and syllabi content or they do not conform to the minimum desired deliverables in their curriculum and dissemination process. So, it is high time to create a universal framework for identifying minimum key deliverables for every programme offered by the institutions and a partial evaluation system through a common platform without compromising the essence of the autonomous status of the varsities. The framework would propound the essence of equivalence among the programmes and curriculums across the varsities in the country. An appropriate root cause analysis may be conducted to strengthen the competency if any

Figure 1.
Canvassing of sectoral hiring phenomena from India

Sectors	2015	2016	2017	2018	2019	2020	2021	2022
Hospitality (including aviation tours & travel)	✓	×	×	×	×	×	×	×
BFSI	✓	×	×	✓	✓	✓	✓	✓
Core sector (oil, gas, steel, minerals, etc.)	✓	×	✓	×	×	×	×	×
Retail	×	✓	×	✓	×	×	×	×
e-Commerce and Transport	×	✓	×	×	×	×	×	×
Pharma and healthcare	×	✓	×	×	×	×	×	✓
Software/Hardware/ BPO/KPO/ITeS/Internet business	×	×	✓	×	✓	✓	✓	×
Auto ancillary	×	×	✓	×	×	×	×	×
Manufacturing	×	×	×	×	✓	×	×	×

Source(s): Compiled from (Wheebox, 2022)

gross deviation is identified. The Indian institutions can move forward individually and collectively in tune with the momentum of the national development vectors.

Objectives

(1) To understand the locus of a knowledge-driven economy encompassing HEIs in India.

(2) To prescribe a comprehensive model that can rejuvenate the uniformity, universality and synergy of the teaching-learning-dissemination-evaluation process across Indian HEIs.

(3) To explore the immediate and long-term benefits to be received by the stakeholders if the proposed model is implemented in India.

Analysis–I

India as a nation is emerging more decisive in every sphere of development vectors. It is presently the fifth largest economic power (in terms of nominal GDP) and is expected to be the fourth after surpassing Germany by 2027, and become the third largest economic power of the world by 2030 (Moneycontrol News, 2022; Shan, 2022). At the same time, a recent report by NATIXIS (2022) reveals that India is poised to become the number one nation in Asia in terms of the labour-intensive sector. More importantly, the country is expected to be the second-best country in the continent in the capital-intensive manufacturing sector bypassing China, Japan and South Korea. This calls for a massive transformation in the Human Resource Development (HRD) ecosystem. Otherwise, grabbing the benefits of the projected GDP rankings would fail. So, the nation requires rightful access and achievement in developing human resources. From this notion, there is an urgent need for manifesting a common minimum curriculum (CMC) across varsities in the nation, or else the growth momentum would be skewed and dispersed across the population in the region. Some identified areas of the country and the aspirational districts grow at a rate lower than the national indicators (NITI Aayog, 2018).

India is still progressing through its formative stages, where the state is not fully capable of creating equitable resources in consonance with the desired expansions of the higher education ecosystem. Of late, private investments are also consolidating the epitome of higher education objectives. In the process, there is a tendency for mushrooming HEIs in the country. Still, they deliver a far less quality standard which has been depicted in National Assessment and Accreditation Council (NAAC)/National Institutional Ranking Framework (NIRF) data (Gupta, 2021; Matthews, 2016). The possibility of compromise in faculty quality and infrastructural support would imply severe compromises with curriculum pedagogy, syllabi and the teaching-learning dissemination process. Moreover, there may be an extreme deviation from the expected level of delivery, the intended syllabi or curriculum and the actual dissemination.

As we fail to supply qualified human capital, India is missing out on the projected demographic dividends and cannot accelerate economic growth. At the same time, the nation is severely suffocated by a mounting unemployment issue. All these indicative analogies reaffirm that the academic degrees offered by the Indian universities are not tuned to par excellence in terms of inputs, availability of teaching and research resources, mentoring, syllabi content, content delivery, dissemination and evaluation. To ascertain the equitability of standards, all the HEIs in India should ideally follow a minimum set of teaching-learning-

dissemination content. It can be ensured by incorporating a minimum common curriculum and partial common evaluation.

Figure 2 depicts that the present HEIs cannot create an equitable workforce level that can be absorbed in the economy completely. Barring a few talented learners, the university system produces graduates, postgraduates and doctorates, of which most fail to contribute to any economic activity that can elevate the nation in the global platform. A large proportion of university graduates are battering together with the high school pass-outs to explore opportunities in thinly limited diminishing government jobs. Finally, a large basket of educated graduates and above are becoming unproductive, creating a new band of *educated liability* for which the state has to offer unique assistance programme, subsidy or some aid in the line of universal basic income (Chakrabarty, 2019). If this educated workforce is not adequately motivated, it can become a vehicle for various anti-state activities. It becomes more painful when it is found that postgraduates and doctorates, especially from the field of technology and management, are applying for unskilled jobs like gangman, office cleaners and peons. The other side of the irony remains glamorous when our best talents directly or indirectly contribute to developing threshold technology, high-end products, medicines and services that are imported or procured by the country by sacrificing the hard-earned foreign reserve. The country invests heavily in creating talented scholars, and, in return, the nation surrenders its forex reserve. Thus, the nation loses on both occasions.

The recently published NATIXIS Report 2022 revealed that India is destined to emerge as the best-suited nation in Asia in the field of labour-intensive manufacturing and would be the second-best performer in the capital-intensive sector, bypassing China, Japan and other countries. This is a testimony of India's growth propensity by 2040. India is bestowed with emerging opportunities, compounded with the rational expectancy of future demographic dividends. As projected by the NATIXIS report, the demand for qualified human resources for accelerating development-driven resurgent India has not been fulfilled, resulting in detrimental outcomes that miserably failed to grab the impetus of demographic dividend and predictive growth trajectory. All these tangible and intangible flaws indicate a severe lack and compromise in the equitability of the teaching-learning dissemination process. So, the

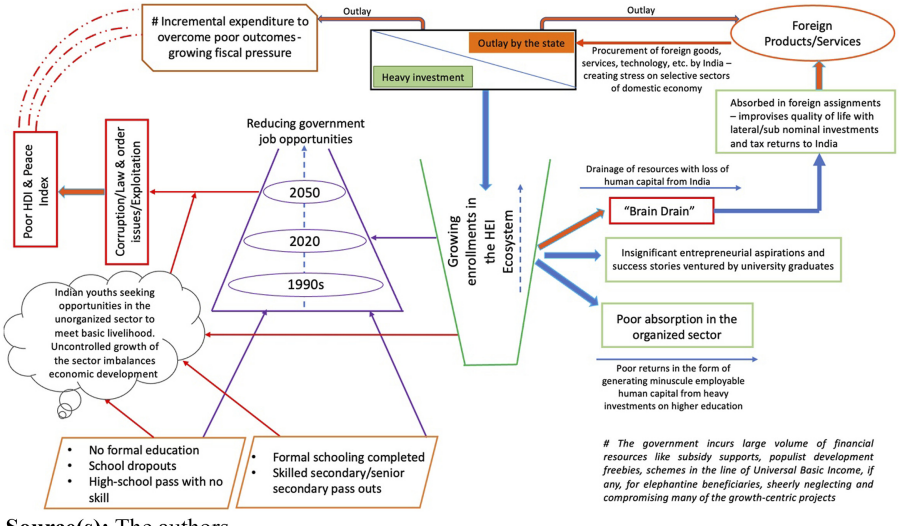


Figure 2.
Locus of the knowledge-driven economy: Contribution and inherent challenges for Indian HEIs

Source(s): The authors

state desperately requires equivalence standards in curriculum development, resource mobilisation, teaching-learning dissemination, evaluation, and training and placement mechanism.

Referring to the TOWS matrix in Table 1, the *x – axis* corresponds to the *impacts of the internal environmental factors* on the efficacy of an organisation/system. The axis may further be subdivided into *strengths* and *weaknesses*. Similarly, *y – axis* depicts the impacts of *external environmental factors* on organisational efficacy. There are four quadrants, namely, strengths in opportunities (SO), weaknesses in opportunities (WO), strengths in threats (ST) and weaknesses in threats (WT).

Any organisation or system should adopt an SO strategy when emerging opportunities embrace the entity concurrently and if the system has the appropriate preparedness or strength to grab that opportunity. Otherwise, the system may suffer from the WO strategy. It would mean that the organisation would not have adequate preparedness, leading to weaknesses while grabbing emerging opportunities. In such a case, the firm needs to avail the WT strategy to reduce its imperfections rather than concentrating on converting weaknesses into strengths.

On the contrary, the system must have adequate strength to combat the emerging uncontrollable outside threat perceptions. In contrast, the WT strategy refers to the essence of preparedness by the firm so that weak areas can be transformed into strengths to address the possible threats befittingly. The Indian HE system must be ready with a high-quality workforce to capitalise on those opportunities. The elite universities must retain their standards and accelerate the endeavour towards excellence by capitalising on the SO strategy. The remaining HEIs that fail to make it to the top 1000 global universities list must produce equitable products so that the educated Indian youth would become more competitive in the job market. There are inherent inconsistencies and resource crunch in tier–II and tier–III institutions. But the Indian HEIs must be committed to grabbing these opportunities seamlessly by adopting the WO strategies. Through this strategy, the weaknesses should be conquered to become strengths through short-term and long-term interventions.

Similarly, in the dynamic global environment, several predictable and unpredictable threats might create inconveniences for the Indian HE system. The HEIs in India must adopt ST or WT strategies so that the possible threat perceptions can be mitigated to a greater extent. If not adopted, the credibility of educated Indian youths in the global market would diminish despite blooming international opportunities. The idea of creating a *Common Minimum Curriculum and Partial Evaluation Process* is to eliminate any academic deficiency among educated youths, irrespective of their intuitional affiliations. In other words, ensuring equitability while producing quality human resources can be secured nationwide either by retaining the SO strategy or by incorporating the WO strategy. As the curriculum design and

		Impacts of internal environmental factors	
		Strengths (S)	Weaknesses (W)
Impacts of external environmental factors	Opportunities (O)	SO strategy (strengths in opportunities) augmented curriculum over and above the CMC	WO strategy (weaknesses in opportunities) incorporating CMC and partial evaluation
	Threats (T)	ST strategy (strengths in threats) augmented curriculum over and above the CMC	WT strategy (weaknesses in threats) incorporating CMC and partial evaluation

Source(s): The authors

Table 1. Indicative TOWS matrix for Indian HEIs

evaluation remain a prerogative of the HEIs, it would act as an internal environmental factor. The sole purpose would be to maintain quality standards and to improvise weak areas into par excellence strengths concerning the global standards from time to time.

India should ideally be poised to grab the SO strategy so that it could become a superpower in the region and across the globe. In some instances, the India Skill Report 2022 shows that the country needs to overcome skill gaps (Wheebox, 2022). In other words, the country needs a common minimum strength in every sphere of its academic and research pursuits. We must offer a CMC and its equitable dissemination so our budding youngsters can encash every opportunity. A minimum level of strength and competency as the expected learning outcome from every course or programme across the nation can thus be ensured. India has not yet incorporated or adopted any such CMC or conducted a common exit evaluation as a partial evaluation. That may be due to a lack of appropriate dialogue, deliberations, understanding of reality, mutual trust or lack of consultative and collaborative approach among the multi-stakeholders.

Analysis–II

India has been witnessing an imbalanced academic growth phenomenon across the country. From the literacy rate to creating patents, the country has disparities in achieving equitable distribution of academic and research pursuits. It is a significant concern for its inclusive growth and holistic development. If we talk about the higher education (HE) system, it is found that no Indian university or HEI comes in the top 100 list of global rankings. A few positions in the list are occupied by leading INIs and a minuscule number of universities (QS World University Rankings, 2021). The mid-level universities are creating a quality workforce from which a small section has contributed to the economy, either in academia-research, administration or industry. Tier–III or newly established universities can hardly produce top-notch professionals even though microscopic exceptions prove the law.

Various factors like competency, intellectual capital, brand image and legacy, funding and endowments, and infrastructure cause segregation among the HEIs. All these are long-term strategic issues that cannot be changed overnight. But there are some sets of limitations which can easily be breached through immediate interventions. It is observed that there are marked differences in the syllabi content, curriculum and academic rigour among the universities offering similar types of programmes. It is quite possible and logical that leading universities have the capacity and competency to provide progressive syllabi and high-end dissemination processes, which are next to impossible for tier–III institutions. There are severe criticisms regarding inequitable commitments, reasoning abilities and domain knowledge of the learners.

Consequently, the tier-III universities develop a teaching-learning dissemination process which suits their compatibility, capacity and the average ability of the learners. But the irony remains that the industry or the workplace never considers candidates without the desired level of competency and appreciable merit. This leads to an increasing number of educated but unemployable youths becoming a liability. They are obligated to search for jobs in the unorganised sector for survival and sustenance of livelihood. Such an imminent trend and academic mishap becomes detrimental to the country's sovereignty, sustainability and survival as this vast number of educated youths can be misguided by separatists and fanatic ethos.

To rationalise the HE system in India, it is inevitable to design a common minimum syllabus and curriculum across all the HEIs in India so that the learners from all the universities would have to undergo a basic common minimum syllabus. A more significant number of learners would then become employable and acceptable by the recruiting agencies in the country. However, the HEIs can have the autonomy to add on the syllabus and content

over and above this common framework. The common minimum syllabus/curriculum would be designed by a collegium of experts from the domain spread over the country, ensuring equitable representation from the state and the concerned central ministry. The committee would formulate the comprehensive framework under a set of terms of reference comprising industry expectations, subject aspirations, contingency and circumstantial bottlenecks. Since all these developmental vectors are dynamic and the learners should be incubated through such a vibrant environment, there is a need for regular reviews and modifications in curriculum structure and content, which can conveniently be done through centralised agencies such as the National Testing Agency (NTA) through better courses of dialogues, words of wisdom, deliberations and consensus. This threadbare process would be able to address all the emerging issues ,facilitating the learners to solve similar challenges more effectively and efficiently in their future workplaces.

The large basket of discussion platforms for syllabus review would be impossible for every university on a frequent and regular mode, barring a few elite institutions. To overcome such a critical academic dissonance, it is vital to incorporate a common minimum syllabi curriculum for each programme that can be designed and developed by the best experts in the country representing academia, research, and industry. A high-power committee would also consider the differentials in deploying resources in HEIs of India so that every HEI easily achieves minimum curriculum delivery in the country. However, by virtue of its autonomous status and legacy of collective wisdom, a university can make appropriate add-ons over and above the common framework to the best of its capacity, aspirations, and satisfaction.

Surprisingly, despite having fascinating strategic plans and frameworks, the projects sometimes do not yield the desired outcomes due to inefficient and ineffective implementation strategies, leading to underachieved outcomes. To offset this syndrome, it is not enough to reconstruct the curriculum design and its implementation across India without stipulating a common partial evaluation process to be built into the entire HE reforms policy.

According to Bonama's strategy/tactics-implementation model (Table 2), organisations must devise the most appropriate strategies that must be followed by an excellent implementation to achieve long-run success. Despite proficiency in implementation, if an organisation cannot formulate an appropriate strategy, the outcomes would be a short-term success. Still, they would eventually end up in failure. On the other hand, even if the organisation develops the most appropriate strategies but fails to implement them properly, it will result in troubles leading to a complete failure. If the organisation neither develops proper strategies nor implements them correctly, it will be a total disaster or failure.

If we use this construct in the Indian higher education system, we can derive that elite institutions are successful because of the meticulous and comprehensive planning of their teaching-learning dissemination and research pursuits, followed by excellent implementation. Second- or third-tier institutions lack appropriate planning for teaching learning dissemination, including curricula design, pedagogy, syllabi or lack of perfect implementation. In some instances, varsities may be victims of both strategic planning and implementation stratifies. As a result, the products of tier–II and tier–III universities are not evolving at par with the best HEIs in India. The universities either suffer from a resource

		Strategies/Tactics	
		Appropriate	Inappropriate
Implementation	Excellent	Success (Q1)	Short-term success – ultimately failure (Q2)
	Poor	Trouble or failure (Q3)	Failure (Q4)

Source(s): Adapted from Bonoma (1984)

Table 2. Strategy formulation and implementation vectors for Indian HEIs

crunch or lack of implementation excellence. Barring a few elite institutions, most of the HEIs in India either become a victim of Q2, Q3, and in remote cases, Q4. So, prescribing a compulsory CMC would ensure that all the universities in India would have to imbibe a particular line of strategy that may lead to global recognition and placement for the learners.

At the same time, the idea of conducting a programme-wise common partial evaluation system would ensure that the formulated strategy for higher education teaching-learning dissemination would be implemented pan-India. Failure due to non-conformance to the strategy would reveal possible gaps in select institutions. The government will need to take corrective actions and initiatives to overcome such resource gaps on the highest priority so that the equitability of final products from the Indian university system should remain competitive and par excellence to take up the most challenging and dynamic assignments. Higher learners' employability and recognition of the institutions worldwide can thus be ensured. India would soon have to realise that it is not only the syllabi or the curriculum to be made uniform or common to some extent, but there should also be an equitable level of teaching-learning dissemination. The process can be ratified by conducting or organising a *National Level Examination (NLE)* for every programme or branch of study.

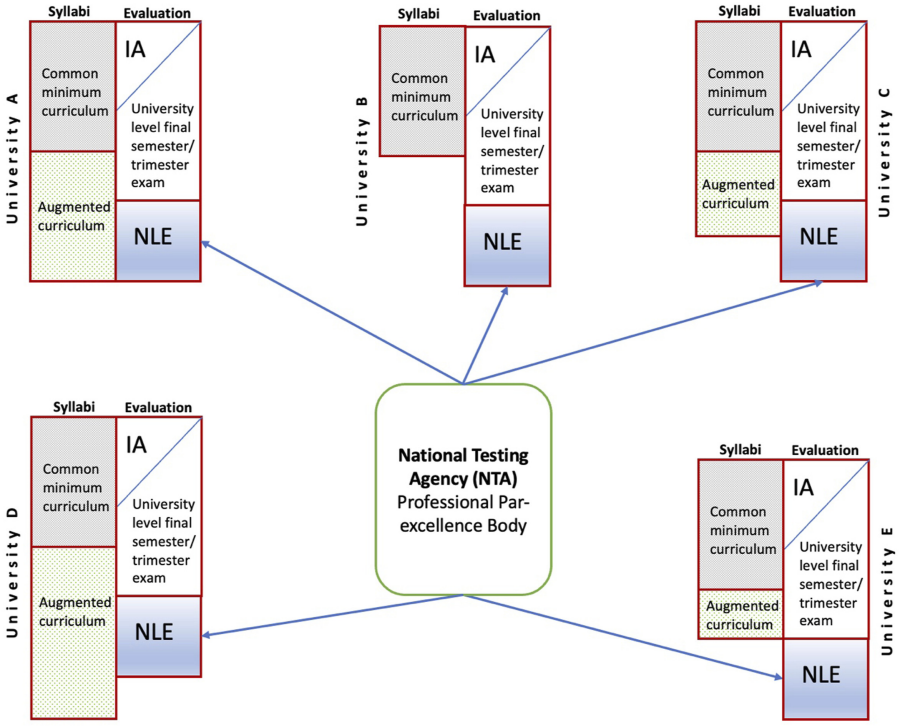
The evaluation process needs to be revamped so that the concerned university would conduct continuous semester (trimester, if applicable) assessments in consonance with their essence of academic pursuits. The final semester/trimester should conclude with a programme-specific *national-level common evaluation.* The learners would be tested on their common minimum syllabus or curriculum. This evaluation method would ensure the equitability of the teaching-learning dissemination process across the Indian HEIs. It is crucial to prevent talented students of tier–III institutions from possibly undermining by prospective recruiters because of not having a literary legacy or branding. The national-level evaluation would also manifest the sense of equivalence amongst the learners, irrespective of the brand association. At the same time, below-par university students identified through the national-level evaluation can be given appropriate strategic interventions and restructuring. Reforms may be initiated by the competent authority so that the concerned HEIs can be elevated par excellence in the country.

Figure 3 describes how the HEIs may ideally follow a *common minimum curriculum (CMC)* along with institute-specific optional addendums of curriculum and content. The common curriculum discourse may be followed by a significant portion of the evaluation mechanism by every university, coupled with their holistic participation in the national-level examination of their outgoing students.

Ease of implementation of the reforms in the Indian context

Education in India comes under the *concurrent list*, which means that the Union and the State Governments play equitable roles in bringing educational reforms to the country. India is a vast country with a democratic and federal setup in functioning governance. Moreover, the universities (private, state or central) are autonomous in the higher education ecosystem. If the governments and all the autonomous institutions agree in the greater interest of bringing equitability measures in the nationwide teaching-learning and evaluation process, the instrument of compulsory evaluation segments planned to be organised by the national knowledge bodies with the help of infrastructure support like the NTAs may be incorporated across all the universities. A certain percentage of total marks of each programme, for example 10% of the marks secured, would have to be reserved for the national knowledge bodies to conduct, superintend, monitor and evaluate students' performance on a specific scale and standards across the country.

There are instances of overestimation or underestimation by specific individuals, even a few institutions, particularly in the imbalanced mushrooming of institutions emerging in the



Source(s): The authors

Figure 3.
Compulsory common minimum curriculum and evaluation framework for equivalence in the Indian higher education system

Indian higher education system. This might create confusion while choosing or preferring the candidates based on career marks. This nationwide partial evaluation process would neutralise any unintentional or human errors of gross deviations, either underestimation or overestimation syndrome, during the normal evaluation process by the universities. Suppose this instrument is not accepted and agreed upon in principle for smooth implementation. In that case, the same model can be incorporated by all the states' central universities or willing universities. This model brings more transparency to the evaluation process. So, at times, the students belonging to lesser-branded universities may suffer from adverse stereotype effects during interviews. If the universities adopt this transparent nationwide evaluation model, the student can easily overcome such a syndrome of perceptual errors mostly committed by interviewers.

This universal instrument of a nationwide evaluation system can also be implemented separately as an add-on to the existing degree, even if it may not be a part of the degree awarding process of the percentage calculation process of the university. Still, the score of this instrument can be implemented as an addendum to the existing degree that would suffice the extent of nationwide equivalent certification. This would give higher mileage and additional credit that the marks of the home university have been further ratified by a higher national transparent body, devoid of any scope of biasedness. This equivalence certificate does not talk about the equitability of the curriculum. Instead, it would reinforce equitability in professional worthiness based on the cognitive faculty of the learner.

Analysis–III

The proposed model would manifest excellence manifold across all the stakeholders (i.e. the learners, academia and research, prospective employers, society and country).

(1) For the country (homogeneity of academic credence) According to the SM-OD Model (Athreya, 1988a, 1990a; Sen, 2003), as clearly described in Table 3, we can establish an interrelationship between strategic management (SM) and organisational development (OD) interventions that would impact the organisation differently. OD interventions indicate the ease and access of resource deployment, while strategic management depicts how best the organisation can formulate its future course of action/policy framework. If the organisation can offer adequate OD intervention and at the same time can design effective strategic management, it will become a balanced organisation or system. If the organisation fails to provide adequate OD intervention even though the strategic formulation is effective, it will result in a vulnerable organisation. On the contrary, despite providing adequate OD intervention, if the organisation or system fails to design effective strategies, it would yield a wasteful organisation since enormous resources have not been utilised because of a lack of strategy. The worst case arrives when the organisation neither provides adequate resources nor can formulate effective strategies, resulting in a declining organisation. If the HEIs can adopt CMC coupled with a partial common evaluation system, all the institutions could conceive par excellence equitable strategic framework across the country. At the same time, the common evaluation protocol would endeavour to determine whether any specific resource gaps can be rejuvenated by implementing adequate OD interventions so that the weak, wasteful and declining nature of many HEIs could improvise to build up balanced excellence in research with improving superior employability in consonance with the dynamics of global competitiveness.

This would create a workforce par excellence across the country generated from the homogamous academic environment and quality standards.

(2) For the students If the proposed model is adopted, students across the country belonging to different educational institutions will enjoy the essence of equivalence or par excellence in terms of their standards, quality, credence and employability. Learners from elite institutions enjoy halo or stereotyping effects as they can associate themselves with the towering umbrella brand image of the elite institutes, which is mostly missing for many students coming out of tier–II and tier-III institutions. This would lead to equal employment opportunities and similar levels in the job hierarchy. At the same time, people are rushing towards elite institutions, spending a lot of hard-earned money that can be saved and may be utilised for future entrepreneurial ventures (Ministry of Human Resource Development, 2016).

(3) For the university system The higher education system across the country should ensure that every university is capable enough to produce a high-quality workforce to be utilised for the nation's holistic development. Barring a few exceptional

	Adequate OD	Inadequate OD
Effective SM	Balanced organisation	Weak (vulnerable)
Ineffective SM	Wasteful	Declining

Table 3. Best fit for strategy and OD for Indian HEIs using SM-OD model

Source(s): Retrieved from Athreya (1988a, 1990a), also reported in Sen (2003)
#https://www.niilmuniversity.in/coursepack/Management/Human_Resource_Planning_Development.pdf;
#http://www.eiilmuniversity.co.in/downloads/Human-Resource-Planning-Development.pdf

intellectuals, all the HEIs can generate a workforce with equitable knowledge, skill and other behavioural attributes so that they can be used interchangeably at any point in time. If an HEI wants to achieve the threshold level of precision, it must own par excellence teaching infrastructural resources compounded with a minimum standard of curriculum, pedagogy and syllabi. Leading varsities may further augment their resources and deliverables in accordance with their commitments towards education and research. The proposed model of partial evaluation is planned to be carried out centrally nationwide to fulfil the country's students with a feeling of social equity and justice. The instrument would enable to position a learner from a geographically remote university having limited access to resources into the creamy layer of the galaxy of high-end professionals as everybody would be evaluated on a standard yardstick.

(4) For the society India is dominated by rural society, as around 65% of the total population stays in villages (The World Bank, 2022). If adopted, this model would revitalise the spirit of equality among the large population since the universities in remote or rural areas can be equally competitive and comparable with the elite metropolitan institutions. The reinforcement of self-confidence would trigger India to achieve the spirit of self-reliance, which is the *mantra* of the Indian government as well.

(5) For the employers The essence of equivalence of skills and knowledge among HE learners across the country would motivate the firms to introduce new ventures, even in rural or semi-urban areas. The availability of superior human resources in remote places and other adequate resources would encourage companies to explore the regions. At the same time, the companies can easily perpetuate as a galaxy of talented human resources would be available locally, regionally and nationally. And they can be imparted with a higher level of training or skill development timely with congruence with the dynamic demands of the sector.

Discussion

The idea of adopting a CMC framework and partial evaluation is primarily based on the broader ideology of imparting an equitable level of education and creating a workforce with equivalent skillsets across the length and breadth of the nation. India has been a victim of rudimentary casteism and social exclusions. Elite groups and culturally upward or financially enriched were the greatest beneficiaries.

If adopted, this common curriculum and evaluation system would address various inequality syndromes in acquiring minimum requisite skills by every citizen of the country. If this concept is adopted and implemented in letter and spirit, young India will achieve the emerging opportunities, and thereby the country will no longer just be a vibrant world economy. It will become a truly inclusive economy. There may be specific challenges regarding the availability of equitable teaching-learning resources at every temple of learning. Still, the actual demand for quality resources can be identified and strategically addressed and bleeding can be immediately stopped by incorporating appropriate electronic modes of dissemination like SWAYAM, NPTEL, DIKSHA and SWAYAMPRABHA, reinforcing post-Covid experiences (Chakrabarty *et al.*, 2020; Taso and Chakrabarty, 2020).

Figure 4 attempts to showcase how the tier–II and tier–III HEIs would accommodate a dynamic CMC with limited teaching-learning resources augmented by long-term and short-term strategic interventions. In certain exigencies, the HE policymakers can think of meaningful faculty and student exchanges as part of immediate strategic interventions, also prescribed in NEP 2020 (Ministry of Human Resource Development, 2022).

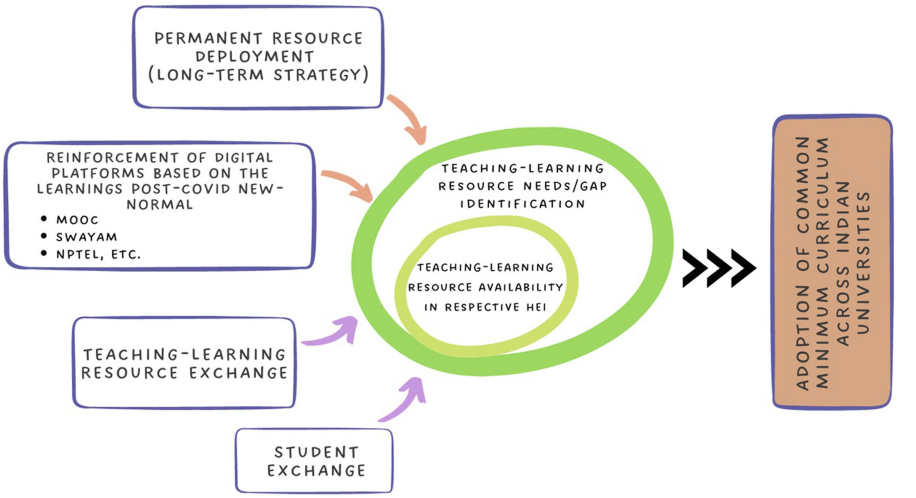


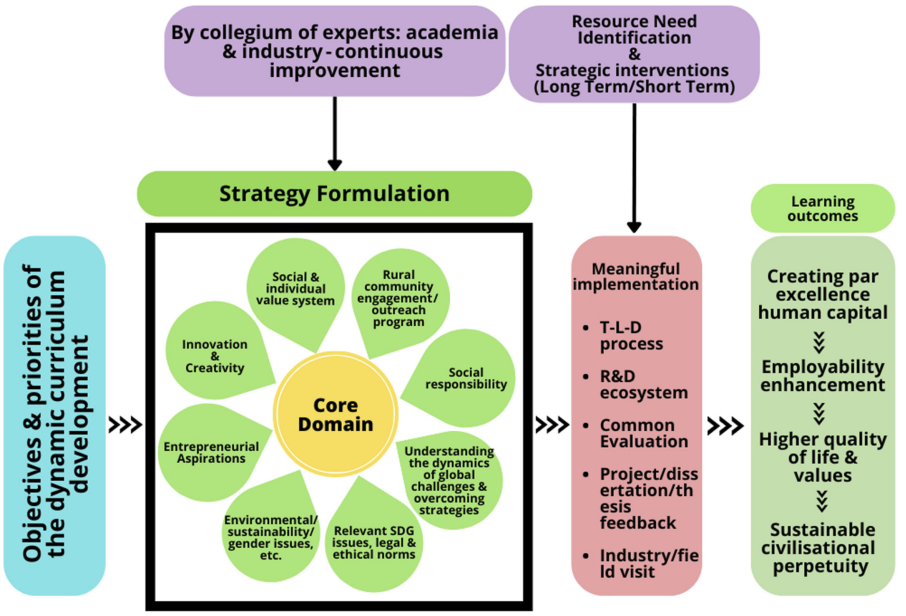
Figure 4.
Accommodating common minimum curriculum across HEIs in India by long-term and short-term strategic interventions

Source(s): The authors

In a nutshell, we are at an alarming stage where HE institutions must identify and explore critical issues of our emerging civilisational crisis. Accordingly, these need to be added to every curriculum as per the demand of the disciplines and suitability. To bridge the knowledge and dissemination gap, every HEI must follow the common curriculum, where the elite institutes are free to make necessary add-ons or augmentations. At the same time, the syllabi framework and its content must be disseminated across all the HEIs in letter and spirit that can be ensured and ratified by administering a nationwide common partial evaluation system for every programme of study. In the process, every institute can identify its resource gap that can be bridged by temporal or long-term strategic actions. The final learning outcome of all HEIs, irrespective of their locational constraints, would converge to an equitable level of performance or achieving par excellence. The nation would be empowered to grow uniformly with the active participation of a large section of our population, including gender representation. The same is firmly prescribed in the NATIXIS Report 2022.

Figure 5 describes how the dynamics of core and additional value-added components coupled with its strategic implementations can yield equitable learning outcomes across the Indian HEIs.

The figure depicts that there should be structured objectives and priorities for designing dynamic and developing curricula. The collegium of experts drawn from academia and relevant industry must be utilised to devise the core domain of the discipline by adopting a recently established knowledge set. The core domain must be supplemented by the appropriate emerging socioeconomic and technology-led dimensions where the learners can contribute meaningfully to elevate civilisational accomplishments. Once the CMC is designed following the spirit of diversity and consolidation, it is imperative to ensure meaningful implementation by every HEI in India. While implementing the same, institution- and subject-specific resource needs or gaps would be identified. The gaps can be filled through long-term and short-term strategic interventions. The implementation strategy must include a partial common evaluation. This would reinforce the essence of equity in the system. Suppose this innovative common curriculum design and assessment are adopted and implemented. In that case, the learners will enjoy the respectful status of equivalence in the minds of academia, industry and society; thereby, the learners would benefit from employability enhancement,



Source(s): The authors

Figure 5.
Flower of curriculum design–strategic implementation for equitable learning outcomes in Indian HEIs

higher quality of life and so forth. A growing success narrative would attract youngsters from remote rural areas to experience the essence of excellence by enrolling in higher education programmes. This would satisfy the primordial objective of inclusiveness of the HE system.

Figure 6 demonstrates how the innovative curriculum design and evaluation model essentially fulfils the essence of the DEI framework. The same is also embedded in the spirit of Figure 5.

Indian intellectuals are highly regarded for designing exceptional models of policy reforms or prescriptions of frameworks both nationally and internationally (Bhan, 2022; The Economic Times, 2020). The global Fortune 500 companies hire Indian technocrats and executives, which is testimony to the high regard and respect of the Indian workforce across the community worldwide.

Indicative modus operandi for formulating minimum common syllabus/curriculum

The educational apex body of the country should constitute programme-specific working groups. Each working group would essentially comprise eminent academicians in the discipline, educationists, domain researchers, representatives from the Ministry of Education and all the state education departments. While preparing the syllabi for the regional languages, respective states would be entrusted with the authority to set up a working group. Representation from other states and the Ministry of Education must be incorporated into such a group. The syllabus of each programme should be prepared comprehensively. The exhaustive templates, bibliography, references, hours of lectures, practical sessions (if applicable), credits and relevant cases should be highlighted along with an annexed teachers' manual. With support from notable educationists and academicians, the apex educational

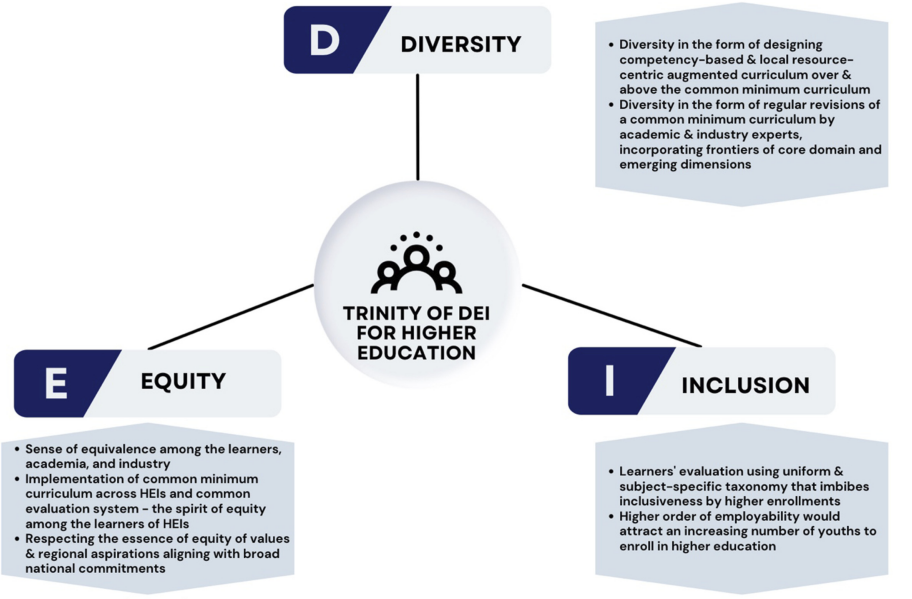


Figure 6.
Achieving the trinity of DEI for the Indian HEIs

Source(s): The authors

body may also prepare basic study materials for the learners that other texts and reference books can invariably supplement.

Based on the approved terminology of the programme, the national educational apex body would have to prepare syllabi for every programme. The members of the programme-specific syllabus committee may comprise the following:

(1) Eminent, highly acclaimed academicians – chairman

(2) Notable subject-specific learned experts representing various parts of the country – members

(3) Associated industry representatives

(4) Honorable vice-chancellors of top 20 NIRF ranked universities, and principals of top 20 NIRF ranked colleges

(5) Representatives from the Ministry of Education, Member Secretary, and representatives from state higher education.

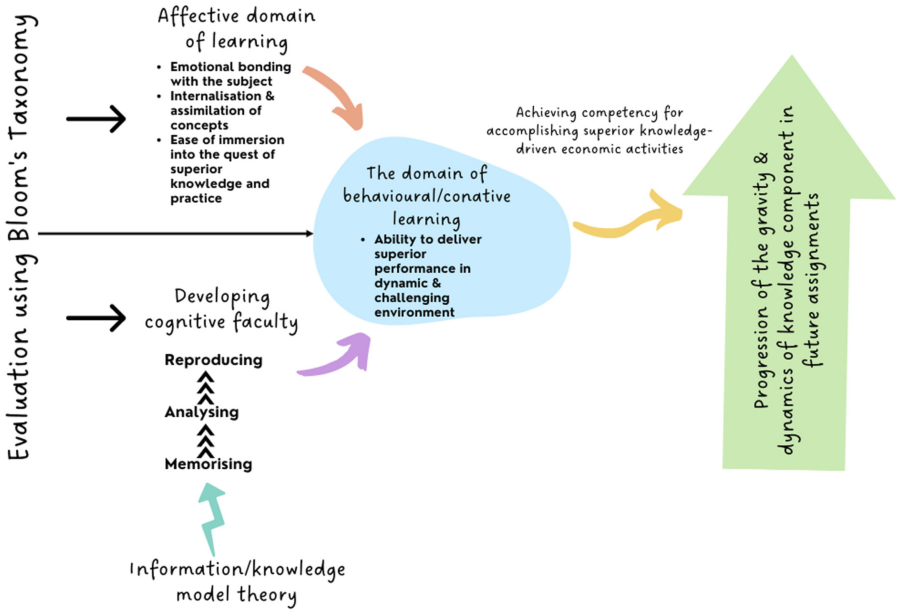
On the contrary, it is equally important to have a certain amount of equity of justice, uniformity and universality for the entire evaluation process so that the grading system would be more result-oriented, transparent and reliable. It is expected that the student assessment must be done through a continuous and term-end comprehensive evaluation process strictly following discipline-specific appropriate taxonomy, for example Bloom's taxonomy, to ensure the holistic development of the learners. The taxonomy prescribes that a learner is expected to excel in the trinity of learning outcomes, that is, cognitive-affective-behavioural (conative) development. Cognitive faculty improvises memorised information on a knowledge set to create analytical, rational and logical thought processes. The affective domain of learning creates a strong cohesion with the persona of the learners through the

emotional bonding or attachment with the subject and its frontier locus that essentially leads to the internalisation or assimilation of concepts followed by the ease of immersion into the quest for superior knowledge and practice.

The behavioural domain of learning attempts to build confidence so that the learner can delimit their potential through meaningful articulation, proactivity and initiations to address upcoming challenges in dynamic situations to win over the syndrome of status quo inertia. The learning prototype and evaluation must encourage the progression of a higher intelligence quotient (IQ) to a superior emotional quotient (EQ) amongst the learners to accomplish future unpredictable assignments. The student assessment question paper must be framed according to an appropriate subject-specific taxonomy. Question papers for each discipline set by every HEI must be evaluated on a composite yardstick broadly guided by predetermined appropriate taxonomy designed by a high-power expert committee to ensure the universality and equitability of the student evaluation process. Similarly, an appropriate mechanism should be followed while conducting a national-level common examination to ensure that the entire HE system would create equitable products for the country.

Figure 7 canvasses the efficacy of the cognitive, affective and behavioural learning continuum for solving real-life dynamic civilisational crises. The figure also exhibits that the evaluation of learners should be segmented on these three components in the line of Bloom's taxonomy.

The products of elite institutions are absorbed mainly in the global platforms and the domestic economy. But the arduous task remains how best and how fast the policymakers can transform the products of tier–II and tier–III institutions into resourceful human capital. Unless a more significant portion of the qualified human resources gives momentum to the economic vectors, the country would remain glorious for a minuscule



Source(s): The authors

Figure 7.
Evaluating the components of learning domains using Bloom's taxonomy

population, leaving behind an elephantine majoritarian mass for whom the extreme economic inequality would compel them to portray a slightly regressive image of the motherland. A small section would cherish aspirational excellence by consuming the lion's share of the resources. Whereas a greater section of the population would cease to exist since maintaining a minimum livelihood would become impossible for them if they are not strengthened and empowered with contemporary knowledge and skills in the vibrance of a knowledge economy.

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About the authors

Arindam Chakrabarty is working as an assistant professor in the Department of Management, Rajiv Gandhi University, India. He has worked in various organisations of national repute within the span of seventeen years of experience. His research areas are strategy, policy reforms, marketing, sustainable development and non-profit organisations. He has completed 08 policy documents; published 20 research papers and 30 book chapters, presented more than 50 conference papers and is working three major research projects as co-principal investigator. Arindam Chakrabarty is the corresponding author and can be contacted at: arindam.management@gmail.com

Anil Kumar Singh is working as an assistant professor in the Department of Management, Rajiv Gandhi University, India. He holds a master's and a doctoral degree in management. His research areas are higher education, policy reforms, financial management and HRIS. He has authored ten research papers and book chapters in various national and international journals. He has presented more than five research papers in International and National Seminars and conferences organised by prestigious national/international academic institutions like Indian Institute of Management, Indore, and Banaras Hindu University, Varanasi.