

# Higher Education System In India: Challenges And Opportunities

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**Abstract:**— In the last three decades, the higher education system in India has grown incredibly and contributed towards nation building. As the country is likely to become the world's largest workforce, there is a deep level of nervousness within India to sustain its growth due to the rise of gig economy and technology disruption. The expectation of capturing a high share of global knowledge workforce will be fulfilled only if there is a focused quality higher education benchmarked at international standards. The sound knowledge of predictable forecast with a dynamic swift of strategic planning is necessary to address the multiple challenges. Mere drafts with past success may not be helpful. The higher education must evolve with balanced skill and knowledge to surge ahead of the curve of ever rising domestic and global demand. The study analyzed the present higher education scenario of the country, the way forward with the perspective of global employment.

**Index Terms:**— Inter disciplinary, Technology Disruption, Gig Economy, Quality Higher Education, Skill Development

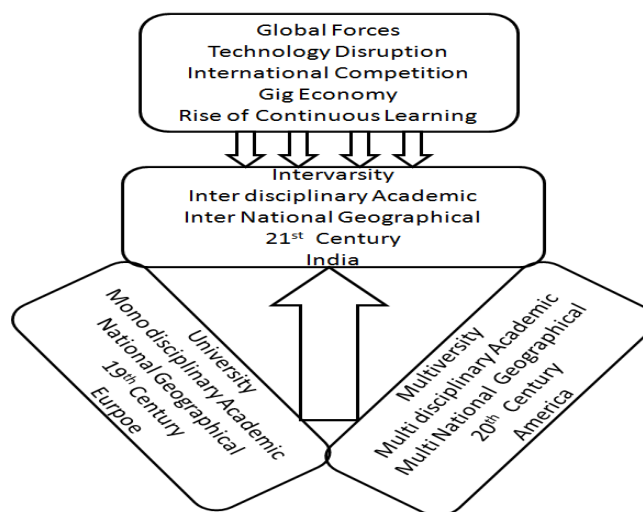
## 1 INTRODUCTION

The Indian higher education system is viewed as a sun rising sector due to the growing population. Both central and state governments share a concurrent responsibility towards inclusive and sustainable development of higher education. The expectations can be achieved only when the knowledge workforce is accelerated towards global economy with interdisciplinary approach as shown in Figure 1 ("The future of Indian Higher Education", 2012). The universities are broken into discipline themed schools, where in the 'inter' emphasizes the importance of relationships among academic and collaborative approach across nations. The paper demonstrates the present challenges and opportunities of Indian higher education in inter disciplinary era.

## 2 INDIAN HIGHER EDUCATION SYSTEM

The Indian higher education system is huge and complex with the presence of different types of universities and colleges. As per the annual All India survey of higher education (AISHE, 2018), there are totally 49964 institutions categorized as 903 universities, 10011 stand alone institutions and 39050 colleges. The total Enrollment of higher education is 36.6 million students with Gross Enrollment Ratio (GER) of 25.8 %. The undergraduate programme (29.06 million) has high intake with distributed enrollment in each faculty of discipline as arts & humanities (36.4%), science (17.1%) followed by equal share in Engineering & Commerce (14.1%). The GER of higher secondary schools is 62.5 % with approximate enrollment of 13.5 million students per year. The country is expected to meet higher education GER as 30% by 2020, with the accounted growth of 7% in the last decade. Still there will be a huge qualified higher secondary school students, will find difficulty in higher education access (Sharma, 2018). The current tertiary education enrollment will get expanded five times in the coming years and expect the expansion of institutional capacity with three times ("India's Education Policy", 2018).

The expectations are to minimize the present challenges and divert them as opportunities during such multifold expansion.



**Fig 1** The predicted peak of Indian Higher education in 21<sup>st</sup> century (Source: IndoGenius, 2012)

The number of colleges and universities in rural area is 60.48 % and 47 % respectively. However, there is a large disparity in enrollment ratio between rural and urban population. The drop-outs are high in rural population due to family circumstances and lack of support. Most of the rural institutions are also failed to impart quality higher education due to faculty shortage, poor infrastructure and limited funding. There is also a wide disparity in gender and community distribution of rural and urban. As per the human development index report (2018), the country move upward towards education. However, the women empowerment to be highly concentrated as there is a sluggish improvement in gender development index. Also, there is a need of improving public expenditure on socio-economic development including education sector. The reservation policies improve the community participation; still it requires additional attention to achieve inclusive growth

## 3 GOVERNANCE AND PRIVATIZATION

The institutions are overregulated with the presence of more than 15 councils at the federal level, in addition to the state governance for state level universities and colleges.

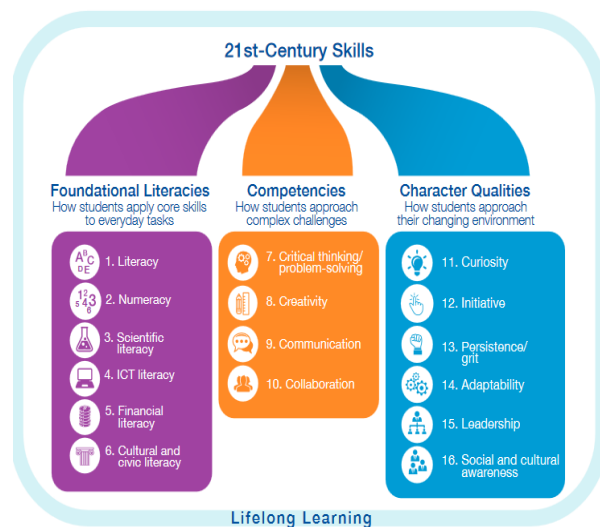
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Complexities exist in the procedures and processes of approval, affiliation, academic and accreditation of higher education system (Agarwal, 2006). Even with such stringent processes, the regulatory authorities are not able to completely control fake universities. The quality of higher education is also doubted compared with international standards. There was a realization that the University Grants Commission (UGC), an apex body, to be reorganized by including members from other councils to cater the emerging needs. The number of affiliating universities is only 285, which increase the administrative workload pertaining to approval, intake, syllabus revamp, faculty recruitment, examination and award of degree. The affiliated colleges are limited or nil participation in university academic reforms including curriculum revision. They just impart knowledge dissemination and skill based training are offered as value additions by few selected institutions. There is a disparity in scope of educational objectives and curriculum standards of teaching learning process as the accreditation bodies and levels are different for technical programmes offered by universities and affiliated colleges. The numbers of accredited institutions is also not encouraging when compared with dense of institutions. The harmonization of accreditation standards and the categorized ranking framework improves the public awareness on quality. The number of privately managed institutions is expanding with 343 universities and approximate count of 30459 colleges. The declining expenditure in public sector and the introduction of self-financing courses in government institutions attributed the growth of private participation. However, there are huge entry barriers for new private institutions, obtaining university status and operating with for-profit education mode. There is a negligence of growth of private sector in policy reforms, when their present share is increasing trend. The research grants are also considerably less to private institutions compared to government institutions. The government should identify and encourage potential private players to participate in the nation development ("Indian higher education sector opportunities", 2012).

#### 4 SKILL DEVELOPMENT IN HIGHER EDUCATION

The detailed study on "Skilling India, No time to Loss" (2018) estimated that from year 2022, every month nearly 1.25 million Indian workers (Age 15-29) will newly join the workforce. The automation of industry using artificial intelligence and robotics make many jobs as vulnerable and redundant. The global gig economy will require a sophisticated workers and innovators to meet short duration jobs with technologically advanced skill sets (Wadhawan, 2018). The lack of stability in career progression will have deep implication on higher education, where the large number of manpower to be trained with 21st century economy skill (see Figure 2).

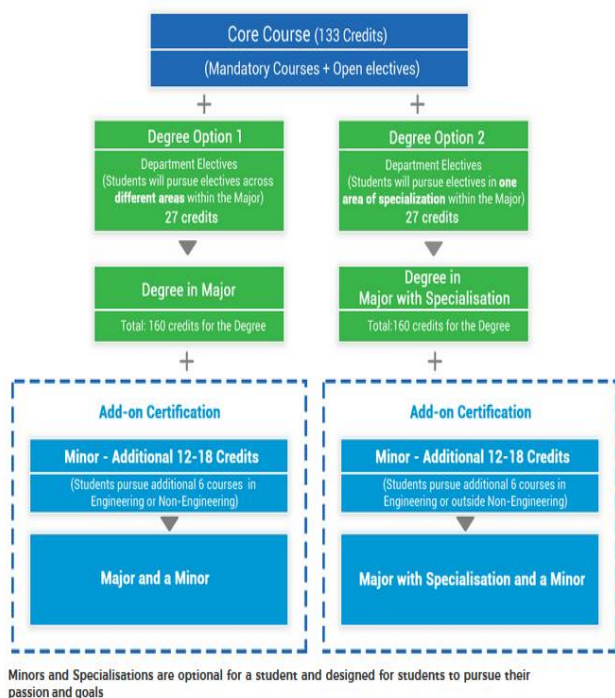


**Fig 2.** Twenty First century economy skill (source : World Economic Forum, 2015)

As the Indian economy needs much more skilled workforce than ever, it is crucial to connect skills and higher education that are relevant to aspirations of the society (Future of Jobs, 2016). The boom in information technology increased the demand for technical courses in the last few decades. However, the trend is changing, leaving unfilled vacancies in technical education due to supply-demand ratio and poor employability of qualifying students. The gig economy industry expects blend of domain knowledge in science, technology, social science, analytics and finance as no discipline is self-contained ("New Vision for Education", 2015). The renowned institutions around the world offer flexible choice based inter-disciplinary courses. The Indian institutions are also gearing towards inter-disciplinary experiential active learning (IDEAL), where candidates can design their own curriculum of choice with majors, minors and specialization as shown in Fig 3. The graduates are provided with bundle of industry ready skills through industry and university collaborations. The adoption of interdisciplinary approach in SRMIST as given in Fig. 4.



**Fig 3.** The inter-disciplinary curriculum to face gig economy challenges

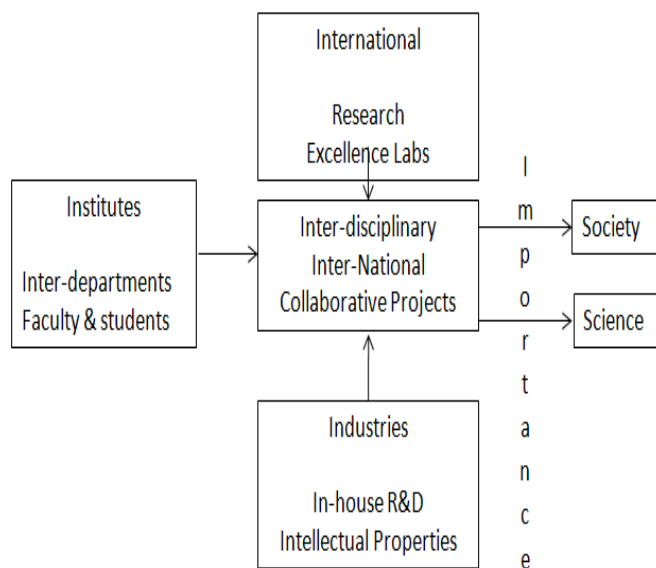


**Fig. 4. IDEAL implementation in Engineering Degree**  
(Source: [smuniv.ac.in](http://smuniv.ac.in), 2018)

The availability of abundant knowledge resources through highly penetrated internet throws unique challenges to institutions to make their system open, flexible and relevant. Though the government has launched massive open online courses (MOOC) and encouraging towards blended learning, there is no clear regulatory framework to recognize the online education on par with formal traditional education. The present enrollment in distance education constitutes 11 % of total enrollment. The distance education mode still struggles with quality content, examination system and recognition in employment opportunities. However, the rise of continuous learning in terms of skilling, re-skilling and up-skilling necessitated the need of open educational resources in mass.

## 5 RESEARCH AND INDUSTRY COLLABORATIONS

The country is aspiring to become dominant in global economy with knowledge workforce, but a mere 0.5 % enrollment in research would not be sufficient. This has great impact in many ways including new innovations, quality teaching and socio-economic development. The absence of world rankings in top positions is viewed as India's underperformance in higher education (Pushkar, 2013). The academia-industry collaboration is quite limited and face challenges in keeping curriculum future oriented. However, the Academia-Industry-Research connectivity has unique benefits to ensure high quality teaching, producing industry-ready professionals and research innovations to meet community development (see Fig. 5).



**Fig. 5. The importance of Industry-Institute-International research alliance**

## 6 FOREIGN COLLABORATIONS AND STUDENT MOBILITY

As per (AISHE, 2018) There are only fewer foreign students enrolled in India (46,144) from neighboring third national countries compared to large out-bound of Indian students (553440) to developed countries. The outflow is mainly for post graduate studies, which is a matter of serious concern with respect to brain drain and revenue loss. In order to attract foreign nationals, the quality of higher education, reforms in admission policies and administration procedures need a lot of attention. The presence of foreign institutions in the form of new institutions and branch campuses are still in draft stage with permission to only top ranked institutions (Mini, 2017). Also, there is a question on permitting for-profit foreign institutions, while the private institutions are prohibited for the same. As the potential growth is not gone unnoticed, there are quite a good foreign institutions have collaboration with Indian partners to offer semester abroad programmes, internships, dual and twinning programmes (Bhushan, 2006).

## 7 RECENT GOVERNMENT INITIATIVES

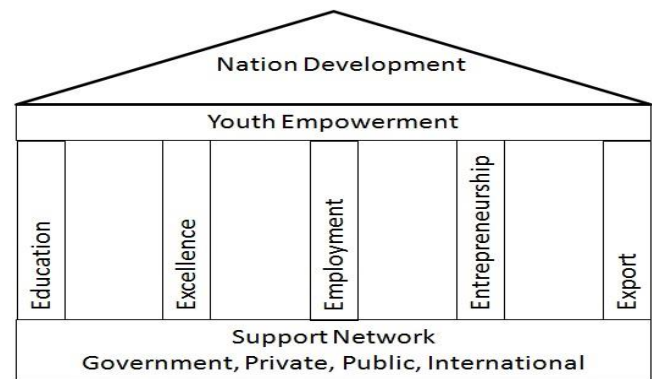
Government policies have a direct and broad effect on institutions. Many of the recent initiatives in policy and implementation mark a transition in the field, though there is a long way to go.

- The annual web based AISHE covers data collection on domestic/ international enrollment, programmes offered, teacher qualification / ratio, infrastructure and budget & finance. The survey helps to find out several educational indicators including GER and gender parity and institution density and serve as base for educational reforms.
- The Rashtriya Uchchar Shiksha Abhiyan (RUSA) focuses un-served areas to promote access, equity and quality mass education.
- UGC has initiated to offer online courses leading to the award of degree and diploma to improve the country's GER. The institutions are recommended to introduce skill based curriculum, entrepreneurship training and startup initiatives.

- The Unnath bharrath abhiyan focuses on transforming higher education innovations in rural development and to help inclusive growth.
- The mandate of Ph.D qualification, compulsory one month induction of newly recruited faculty, annual refresher programme using MOOC platform, career advancement scheme using academic performance indicators, international collaborations through global initiative of academic networks (GYAN) and several other schemes are expected to improve the teachers and teaching quality.
- The Atal innovation ranking focus on higher education institutions to promote and nurture innovation culture in the academic environment.
- The annual National Institutional ranking framework was introduced to create awareness about global ranking along with India-centric parameters such as inclusiveness and diversity. This also prevents the society to get misled with various media rankings.
- The high scored accredited institutions are awarded as Category I institutions. Such institutions are granted autonomy in curricular reforms, start new courses, establish off campus centres, set up research parks and offer skill development courses aiming to impart quality mass higher education.
- The potential higher education institutions are scrutinized and given the status of institute of eminence to make distinctive contributions in teaching-learning, research and thus excel towards global ranking, as only very few Indian institutions are emerging.
- The draft education policy released in year 2019 focus on restructuring higher educational institutions, simplify complex approval/affiliation process and autonomy to institutions

## 8 CONCLUSION

The presence of India in the global map has a reasonable visibility; however the country is in the transit state to meet the target and expectations of everyone. The recent government initiatives are welcomed but to be geared at accelerated rate in implementation. There has been a significant and consistent worldwide reform in higher education. India's ability to emerge as a globally competitive country will substantially depend on its knowledge human capital. The presence of vast challenges insists to carefully choose the proven strategies that lead to real and lasting results for success pathway. The study of rapid change in global requirements, issues and opportunities of higher education in India would help us to take necessary steps to face modern, competitive economy. This shall ensure a strong hold of Indians in the global market and make our country to be a developed nation in a short span of time. With strong foundations from government, public, private and international (GPPI) supports, the five pillars supporting the youth empowerment – Education, Excellence, Employment, Entrepreneurship and Export- shall be constructed upon leading to strong nation building in the decades to come (Fig. 6).



**Fig. 6.** Nation Building – Youth Empowerment through 5Es and GPPI network

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