

# Internationalisation of Higher Education in India through Technology Transfer

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## Abstract

From ancient times, India has been touted as a global study venue that offers high-quality education at a low cost. However, this trend has declined over the years. Thus, the study aims to discuss the present Indian Higher Education environment in light of the covid-19 pandemic. Attempt to explore if there are any opportunities for Indian higher education to expand worldwide and capitalize from contemporary technological advancements. According to the research findings, international academic institutions must be encouraged to operate in India. Likewise, Indian academic institutions should also partner with industries to encourage technology transfer both at the national and international levels. Therefore, a regulatory mechanism should be put into effect to facilitate such entrance and assist India in reclaiming its status as a Viswa Guru.

**Keywords:** Higher education institutions, Technology transfer, Industries, COVID-19.

## Introduction:

Globalization and education both deal with indoctrinating people towards a thriving country's future. Since a system of interwoven global cognizance is increasingly identified as an important chattel in this modern world of information and technology. Still building education as a guiding principle for global resilience would need a blend of multi-cultural understanding to come up with judgments for real-world situations. Therefore, institutions are emphasizing the relevance of interactivity in a global environment.

In higher education, globalization specifically refers to swapping educational and research programs with learner mobility. Patenting, start-up firms, spin-offs of universities, joint and outsourced research are some of the ways to go round from local to the global level. Due to changes in the teaching and learning environment, all educational institutions are being motivated to internationalize. Since transnational education links provide an essential ingredient of academic excellence and technology transfer. This phenomenon primarily focuses on a group

of people who have been purposefully ingrained in technological innovation with organizational goals. These interconnections are often recognized as tech transmits joint projects across campuses and industries.

En voyage, the Indian Government and educational authorities also embarking on their extensive attempts to promote internationalization with the intent of scintillating on the worldwide radar. Despite the government's internationalization endeavors like 'General Cultural Scholarship Scheme', 'Global Initiative for Academic Networks', and 'Connect to India programme' just a few institutions represent the country on the international stage. For example: 'Study in India' programme offers mobility options to UK graduates, 'UK India Education and Research Initiative' (UKIERI) provides agile incentives to UK and Indian collaborators to formulate short-term mobility options throughout India for UK undergraduate and perk up the employment prospects.

Since India has not gained from globalization as much as its foreign partner are concerned. For instance, Southeast Asian students often aspire to study at British or American educational institutions, albeit universities from Japan too are gaining traction. It befalls prudent that Indian campuses explore other tactics as they have great strides to go. Nevertheless, this does not mean Indian policy can't create influence on integration. This study is a trivial attempt to check if options are available for Indian higher education to expand globally and therefore prosper from modern tech know-how.

### **Objective:**

With the present threat of the Covid outbreak, it is rather imperative to examine out the application of technology transfer to facilitate Indian university education. As prevailing shreds of evidence have constructed scholastic opportunities to uncover unacknowledged potency and underappreciated resources. As a result, the primary goal of this study is -

- To discuss the present incarnation of the higher education system in India.
- To explore pre and post corona strengths and potentials of the Indian Higher education institutions to globalize thru tech – transfer.

### **Review of Literature:**

(Nepomuceno, 2018) delves at how far the chosen ASEAN Higher education institutions (Indonesia, Malaysia, Philippines, Singapore, and Thailand) executed internationalization. Based on the history of the Knight's internationalization model, the researcher fabricated a paradigm of internationalization besides inquired into the existing state of internationalization at the selected HEIs. Analyses sorts, the five HEIs into two categories: one that is becoming internationalized with very little broach stages with an obvious negative attitude. The second being internationalized which is finishing the spiral of internationalization. Despite several shared techniques and transnational features detected in the practices of the chosen HEIs only two institutions successfully concluded Knight's seven-phase internationalization. In the same way (Madula, 2018) in recent years, Philippine campuses are being committed to internationalization bearing in mind solidarity within ASEAN and the era of globalization. Such efforts must be formalized and acknowledged by the government. Hence, lead to adaptation of internationalization policy by Commission on Higher Education (CHED) to provide universities operations appropriate angle plus articulated specific measures and supportive components for the higher education sector. In the development and implementation of its internationalization strategy, HEIs are urged to follow a comprehensive approach instead of arbitrary actions, to facilitate collaboration and get a long-term impact. Distinctive features of internationalization policy are academic, program, and institutional mobility. Similarly (Soon et al., 2015) the case study was done based on students attending a course delivered by a university professor in English. A case study that investigates learning experience in students confers an insight into Russian higher education while going for internationalization. The analysis revealed that several learners' struggles in comprehending, communicating, reading, and writing English, as well as the difficulties they faced in reaching out for help and finishing tasks since it's not their native language. Further, (Magzan & Aleksic-Maslac, 2009) report of a private business school in Croatia

concentrates on the convergence of internationalization and information and communication technology and perceives ICT as a fundamental driving component for higher education globalization. ICT allows worldwide academic collaboration, which more or less intensifies personal capabilities establishes channels, nurtures innovation, and makes available information well outside of their natural ecology. Ultimately (Jibeen & Khan, 2015) reveals higher education internationalization is not only seen as an end in itself but as a method to promote educational quality. It is the pinnacle of universities connections because it rewards information transmission and exchange as well as talent mobilization in favor of global research & curricular attraction are of higher education internationalization. It also has certain drawbacks such as dangers commercial gain, overseas academic colonialism, the challenge of assuring superiority.

### **Internationalization and Technology transfer in higher education:**

Institutional partnerships, ranging from conventional university-industry alliances towards technical assistance to foreign universities' collaborative efforts constitute a distinct kind of modernization. The rapid pace of globalization emphasizes global student movement and research reciprocity. The most obvious component of mobility comprises cross-cultural and course content, research, and extracurricular international activities without really heading off the nation. Hence, universities are shifting from their conventional duties of research, teaching, and information dissemination to a more advanced function of developing spinoffs and supporting academic entrepreneurship. Still, every learner wants to get enrolled in an effective educational institution. Where healthy learning ambience persists also a wide spectrum of instructional design and solid infrastructure is available. Accordingly, each educational establishment should strive to achieve these attributes simultaneously there must exist interoperability and collaboration across all domains whether inside or outside the country.

Furthermore, the COVID-19 dilemma has driven progress in online courses that can offer valuable hallway towards a

highly versatile learning experience: a blend of synchronous and asynchronous learning. Naturally, this will contribute to ingenuity expansion in both content aspects and dissemination modes. Student enrollment, assessments, apprenticeships, placements, career opportunities, and learner movements significantly have borne the brunt of said crisis. Still, India has done well to overcome this situation within its limitations. Institutions have demonstrated adaptation, dexterity, and inspiration to deal with the scourge through their perseverance towards learners and also to society. To optimize sustainability, Indian academia underwent multiple reform operations. Virtual classrooms, Webinars, interactive MOOCs as well as the provision of digitized materials are taking place with the help of software/applications namely MS Teams, Canvass, Zoom, Google Classroom, TCS ion. Likewise, academicians indeed utilize social media networks such as WhatsApp or Facebook to produce course-specific content. These collaborative efforts made sure successful online teaching and learning permanence. Moreover, cosmopolitan exposure with burgeoning overseas interactions opened opportunities for enrollment agility with automation procedures. Points out that India can contend and sustain itself in a global milieu.

### ***Future Contours of Industry, Technology & Academic Collaboration:***

In today's world increasing attention is placed on the relationship between science, technology, and university spinoffs. The evolution of revolutionary and insightful technological advances opens up new windows of opportunity as well as obstacles at the same time. To wangle the "Atmanirbhar Bharat" vision, India must grow on a journey that consolidates socioeconomic development and inclusivity, along with the sustainability. A significant emphasis will be put on propagating indigenous knowledge and technology, driving grassroots interventions. The COVID-19 pandemic offered convincing evidence of potential collaboration, exchange, and synchronicity of research and development centers, academic institutions, and business units purposeful to attain economic growth and development.

Moreover entrepreneurialism; academic and professional have flourished over the last couple of decades. Universities and colleges are being treated as a reservoir of a soaring industry. University franchises can improve the sustainability of the overall society. To begin, they generate commercial conduits by turning research findings into feasible solutions. Genuinely shoot motivations for start-ups consortia in distinctive areas. Further, they often undertake the majority of their fundamental operations — for example, contracting, acquiring inputs, & manufacturing locally, resulting in a magnification impact on regional growth. At the same time, the IT sector is embroiled practically in every aspect of human life owing to its unleashing ingenious ability. Focus on producing value commodities, processes, organizational functioning, and administrative actions for both industrialized and budding economies.

### **Outlook of Indian higher education internationalization:**

India is a significant player in the global education market, boasts as the world's most extensive ecosystems in institutions of higher learning. In total, 39,931 colleges, 967 universities, and 374 lakh students enrolled in college with the Gross Enrolment Ratio of 26.3 percent in 2019. Still has a lot of room for improvement thanks to broad educational architecture and academic disciplines. Educational plethora from Yoga, Ayurveda, and folk skill to modern scientific and technological advances such as virtual and artificial intelligence, cognitive computing exists. Ultimately it correlates to an increased likelihood of all-around learning i.e. academically and professionally progression. Further, India comes forward as the second-largest e-learning market just after the United States by 2021. The digital learning sector in India is expected to attain US\$ 11.6 billion by 2026; from \$1.96 billion in 2021. The country's education sector offers incredible development potential.

India is also preparing to approve dual and joint degrees awarded by Universities in India in collaboration with foreign universities as an element of its international expansion strategy ever since the insertion of the National

Education Policy this year. India can position itself as a globally preferred study destination that offers high-quality education at a low cost to restore its status as 'Vishwa Guru'. Indeed foreign student enrolment ratio has grown dramatically and is expected to rise further. For that Higher education institutions should be incentivized to bond with campuses in other countries especially the top 100 institutions of the world. Besides international research partnerships and faculty-student exchanges memorandum agreements; directorial centers need to be constituted at every HEI that can put forward assistance to international students in all facets.

En route of improving its global engagements India to a certain extent unlocked the aisles for institutes around the world seeking Indian allies. Although we haven't finalized campuses yet a fair amount of resourceful and proficient global bodies from Australia, New Zealand, the United Kingdom, and the United States have articulated a desire to participate in India.

The fundamental goal of government policy should be to immediately cease polarization by reforming universities, colleges into notable multi-disciplinary 'Knowledge Hubs' or HEI clusters perhaps with more learners. This will contribute to the formation of thriving enclaves of researchers, peers, effective demolition of counterproductive haylofts. Stressing on deep-seated value synthesis and developing fresh career paths with both tangible and intangible augmentation. Eventually virtuoso pupils in a bunch of fields such as creative, constructive, or cognitive develop significant networks beyond related fields. Before that, the country must transform the inclinations of Indian students studying abroad. The proportion grew from 66.7 in 2000 to 305 thousand in 2017, exhibiting 9.4% annual growth. India following China, considered being the second leading country. Over 70% of the total is accounted for by the United States, the United Kingdom, Australia, and Canada. Indeed the United States continues to be the dominant player in hosting Indian students, whilst the percentage has decreased over time. Nonetheless, the ratio of scholars taught by these nations fluctuates during that timeframe. (Varghese, 2020).

## Problems and Suggestions:

Now more than ever, educational institutions in India have acknowledged that they were not acclimatized for conducting online classes owing to the pandemic. So to strengthen ecosystem order educational internationalization thru technology transfer must be perceived as a feasible solution. Say country can swap over world-class faculties and apt infrastructure. However, the arrival of elite international organizations is expected to have ripple effects. For instance, the finest faculties from national or state universities are expected to be scooped by high-paying corporations. This might hasten the exodus of top academic members from often overcrowded universities. Furthermore, the prime objective of publicly financed colleges has been to deliver quality education to the wider populace at minimal costs based on social welfare norms. It's not fair to expect this from foreign universities to imply issues of inclusiveness. Again, a variety of criteria such as the university's status, scholarship prospects, international exposure, visas, safety, and most crucially, post-study career odds will almost certainly affect students' choice.

On the flip side of the coin, the Indian education system is well-known for being authoritarian and ineffective. It certainly needs to overcome apparent barriers if truly wishes to welcome foreign entities. Still posting governing landscape up to the standards of foreign institutions is a key challenge. As a result, establishing regulatory standards and processes would not automatically provide these universities with the operational independence they seek. Hence, the following suggestions might come out in handy-

- Foreign organizations must have appropriate academic liberty to dictate course material, enrolment protocols, fee mechanisms, faculty recruiting procedures, and governance among other things to function.
- If organizations wish to indulge they must have a straightforward outlook on transnational higher education through discourse between foreign authorities and other players. Yet it should be vigilant about particular vernacular approachable to policy-makers while conveying internationalization tactics and goals.

- To foster innovation, organizations and instructors will be given the freedom to experiment with coursework, teaching, and evaluation methods within a wide framework of higher education.
- Credentials that ensure uniformity between programs and activities within both online and conventional course groups.
- There must be an interesting and engaging educational atmosphere to guarantee students sincere knowledge exchange.
- To acquire a stronger place States need to consider both transnational education's demand and distribution.
- The state may raise inward student immigration by probing the gamut of reactions while forging the linkage.
- Pedagogical aspects must also be decided by the institutions. Thus, students must be viewed as an active participant who is responsible for their learning.

## Conclusion:

Given the contemporary scenario, individuals need to have multilingual as well as multicultural qualities to survive. It becomes extremely important to nurture innovative ideas and effective marketing of unique approaches. Transfer of technology is one such innovative approach; corresponds to agreements and cooperation involving technology and innovation between interested parties. Technological associations can work wonders if established within the education system. This research is an indication of India's widespread educational potential to enrich socio-economic development, inclusiveness, and sustainability in higher education institutions.

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