Socio-Economic Impact of COVID-19 on Indian Economy

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COVID-19, PRIVATIZATION, AND CRISIS OF HIGHER EDUCATION

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Abstract

The crisis of coronavirus pandemic has affected every sector of the economy. Higher education has been facing different challenges, even before the COVID-19. Before COVID-19, the Indian economy started slowing down. The present study was conducted before the outbreak of COVID -19 to study the impact of privatization on the quality and efficiency of higher education. The objective of the study was to assess: the qualitative inputs provided in terms of infrastructure, faculty, curriculum, academic mentoring, and monitoring, the necessary skills provided to foster global competencies among the students. Teacher and student Data have been collected from Public and Private Universities/Institutes of higher learning in the State of Punjab. The findings reflect that there was a lack of employability skills provided to the students in professional and technical institutions, low placement and mismatch between demand and supply in the world of work, shortage of, and required number of professionally trained teaching faculty, The situation now becomes worse after the outbreak of the coronavirus as the digital divide is adversely affecting educational system. Campus placements have taken a hit amid the uncertainty in the academic calendar in the higher educational institutions due to the Covid-19 pandemic. People living in rural areas and those belonging to the backward socio-economic category are facing the risk of lagging in the educational system. High-quality learning with the help of digital infrastructure can only be achieved by addressing digital gaps which will change the landscape of school education forever.

Introduction

The COVID-19 pandemic has given us tremendous insights into how the role of technology can radically shift and how to adapt learning processes in

challenging times. Even before the pandemic, changes in society and student expectations have motivated to redesign pedagogical methods to cater to global market needs. Continued advancement in digital technologies and social media, led to the creation and sharing of knowledge. Online learning, emphasized enabling students to construct knowledge, exchanging ideas through discussion forums, and providing immediate feedback. The role of the teacher has been transformed and plays a critical role as a guide, facilitator, and diagnostician of the learning. The needs of society have changed the landscape of higher education and the development of the economy. Besides, its primary function is to impact, create, and disseminate knowledge; foster creativity, critical thinking, and promote analytical abilities to infuse life in teaching and learning; enable students to make independent and informed decisions, and become responsible citizens of the society; develop human resources for the promotion of social and economic growth and the creation of a knowledge society. Higher education has been facing different challenges, even before the COVID-19. Before COVID-19, the Indian economy started slowing down.

Challenges of Higher Education

Throughout the world, though higher education is growing at a rapid rate, it is continuously under pressure to cater to the needs of society due to:

- the explosion of knowledge, information, and communication;
- population explosion;
- aspirations of the youth;
- focus on capacity building;

This calls for continuous up-gradation of the skills for global interdependence, which necessitates learning throughout life;

- another challenge that is reflected in higher education is the exodus of the students to the USA, Canada, and now to Singapore, Australia, etc., for higher studies, and;
- opening of campuses in India by the foreign Universities that offer much sought after courses by the youth.

Because of the huge demand for higher education from all the strata of society, other pressures are causing concern concerning accessibility, equity, quality, and resources, as enumerated by Sudarshan and Subramanyan (2012):

Accessibility and Equity, i.e., making provision for affordable, quality, and globally-relevant education for the aspiring youth from all the strata of society, i.e., economically underprivileged concerning the rural-urban, caste-class, gender, religion and region, etc. that leads to a gap in the demand and supply.

In Light of these Developments, the Present Study was Carried out with the Following Objectives.

The primary objective of the study was to assess and compare the qualitative aspects and efficiency aspects in Private and Government Universities, questions were framed accordingly for the Departmental Heads, students, and teachers.

The question arises as to what extents do the Private Universities and institutions of higher education fulfill the criteria of quality and efficiency in technical and professional knowledge, to enable the youth to become successful professionals and technocrats.

To assess the qualitative inputs provided in terms of infrastructure, faculty, curriculum, academic mentoring, and monitoring, the necessary skills are provided to foster global competencies among the students. The data have been collected from teachers, students, and Heads of State/Public and Private Universities/Institutes of higher learning in the State of Punjab.

Quality in terms of employability of the technical graduates for global competitiveness; catering to the demands and requirements of industry/ companies; focus on capacity building and the output.

Another challenge is the declining budgetary resources by the Government as 75-80% of the budget is spent on salaries and maintenance, with small or marginal resource allocation for requirements of the curriculum, teaching-learning, research, and innovation. The shrinking budget of the Government on higher education is a significant cause of concern.

The challenges of equity and accessibility have been a major cause of concern as it has led to:

- Adhocism: privatization without checks and balances;
- Shortage of trained and highly qualified faculty;
- Ill-equipped libraries and learning resources;
- Inadequate infrastructure (physical and software);
- Lack of technical skills, reasoning, and soft skills.

These are some of the significant factors affecting the qualitative aspects of higher education.

A Mismatch Between Technical Education and Employability

Being a growing economy, there is an increase in demand for engineers and ICT professionals in India. Still, they lack competencies required by the engineering firms, industry, and their hiring companies, as pointed out by

Gokaldas (2010). The graduates do not possess sufficient skills and therefore are not in a position to satisfy the employers to meet the requirements.

According to India Skills Report (2020) Wheebox, which is India's leading online Talent Assessment Company, conducted an employability skill test online from July 2019 to November 2019 (accessible from mobiles, tablets, desktops, laptops, etc.). The responses were obtained from more than 3,00,000 students from various backgrounds, from different educational institutions revealed that the maximum employability, i.e., only 46% were employable and ready to take up jobs which shows a decline from the previous year.

Another challenge is the increase in privatization of higher education in technical and professional fields. The question here arises: Have the Private Universities brought about any significant improvement in the Curriculum; Methodology; Research and Development and learning outcomes?

The edifice of higher education stands on the weakest foundation of primary education. It is like an inverse pyramid.

With the privatization and expansion of higher education, there is a:

- A mismatch between the demand and supply in the field of Management and Engineering and Technology.
- A mismatch between the curriculum and requirements of the industry.
- Lack of interaction between the industry and universities/academia.
- Lack of integration and interaction of Science, Engineering, Technology, and Research.

It is the age of information, and the workforce needs to be prepared to become a 'knowledge society', and this calls for continuous up-gradation of knowledge and skills and universal communication for global interdependence. It has necessitated learning throughout life for human development and economic growth.

The current study was planned to conduct to assess the qualitative aspects of the inputs in respect of Qualified academic faculty; Financial resources, and allocation; Curriculum framework; Process of teaching, learning, and evaluation; Faculty empowerment, and student development; Governance, and Management; and Institutional values, and social responsibilities.

The findings reflect that there was a lack of employability skills provided to the students in professional and technical institutions, low placement and mismatch between demand and supply in the world of work, shortage of, and required number of professionally trained teaching faculty, low standards of

teaching and research, and students not being adequately prepared to serve the society, lack of industry-academia interface.

Review of Literature

Murti and Bino (2014) explore the phenomenon of skill shortage and found that Indian companies are hard to fill vacancies. People with limited skills are available for recruitment (Rheeder, 2017). Ejiwale (2014) found that graduates are unemployable due to a lack of necessary abilities required by the work as claimed by employers. Bremner (2018), conducted a study using qualitative and quantitative methods stressed more on digital skills to close the gap between the degree outcomes and skills needed for the job market. Srivathsani and Vasantha (2018) found that lack of skills is affecting the output, which results in a decrease in productivity. Abelha, Fernandes, Mesquita, Seabra, and Oliveira, (2020) found a mismatch between university graduates' competencies and employers' needs, and there is a need to develop competence. Singh, P., Thambusamya, R., Ramly, A., Abdullah, I. H., & Mahmud, Z. (2013) findings revealed that several areas of dissonance in the higher education curriculum and generic skills needed in the workplace.

Shah, K. K. (2020) highlighted that urban areas children have better access to digital infrastructure than rural areas. Online education has resulted in widening economic inequalities, thereby aggravating the knowledge divide. Reddy, Bose, and Vadehi (2020) revealed that massive online education exacerbates the existing socio-economic disparities in opportunities. Das and _Biswas (2019) found that there is a decline in the quality of learning at the primary and secondary levels. According to Gupta and Garg (2020), the majority of graduates are unemployable because of the present examination system in higher education which laid more emphasis on rote learning than on understanding and failed in developing 21st Century skills. Daniel (2020) suggested ways to address the COVID -19 Crisis to repair the damage to students learning trajectories by offering guidance to teachers, institutional heads, and officials.

Objectives of the Study

The study is focused on the following objectives:

a) To assess the adequacy of the qualification of the academic faculty

b) To assess the Accreditation and Assessment of the Universities and Promotion of Research.

c) To assess the efficiency and productivity of the teachers concerning their contribution to research activities and research output.

Analysis of Results

The data collection has been carried out in 6 Government, and 8 Private Universities/Institutions selected from 12 districts of Punjab and the Union Territory of Chandigarh.

Objective Wise Results

a) To assess the adequacy of the qualification of the academic faculty

Only a total of 27.85% of the academic faculty (Heads and Teachers) were adequately qualified in the Private Universities, as compared to 53.47% faculty in the Government Universities.

Since the teachers of the Private Universities are not adequately qualified, it adversely affects the process of teaching and learning, leading to the low quality of the expected learning outcomes of the students.

b) To assess the Accreditation and Assessment of the Universities and Promotion of Research.

- For the quality assurance as assessed by NAAC, the Government University Departments/Institutes outnumber their counterparts in getting A and A++ Grade; which is 14.92% against 4.36% in the case of Private Universities.
- 38.09% of Government University Departments/Institutes rated them among the top 10 Universities of the National level, which is higher than 34.78% of Private Universities.

c) To assess the efficiency and productivity of the teachers concerning their contribution to research activities and research output

- 62.5% of Government Universities/Institutes have support from UGC/DST/ICSSR/AICTE bodies in comparison, to 34.04% Private Universities.
- Recognition of Research Centres/Centre of Excellence by State/ National Bodies is mentioned by 37.05% in Government and 24.27% in Private Universities.
- Special Research labs sponsored by Industry/Corporate bodies were mentioned by 31.91% Private; 32.50% teachers from Private and Government University Departments.
- *Efficiency and Productivity of the Teachers:* It was found that the public universities' teachers excelled in research output as compared to the Private University teachers. But, in the field of product or process patents, the private universities teachers'

contribution was higher in the areas of Mechanical Engineering, Computer Science, Electrical Engineering, and Pharmacy.

- *Efficiency and Productivity of the Students* in private universities have the upper hand in aspects like participation of the students in co-curricular activities (25 percent than of 21 percent in public universities); activities organized by the students independently (18 percent than of 12 percent in public universities); ability to interact with the experts (61 percent than of 49 percent in public universities).
- *Employability is taken as an indicator of the efficiency* to assess the Output of the Teaching and Learning through success and employability of the students. The rate of employability was reported to be 44 percent and 43 percent respectively by the private, and government university students in the subjects.

Placements: Subject by Session by Institutions

The data are presented in the table:1

Table: 1

Subject by Session-wise Placement of Private and Government University Students

Institution/ N/Percent	Subjects/Session 2017-18										
	CSE	Mech.	ECE	EEE	IT	Civil	MBA	Hotel MGT.	Arch.	Pharma	Total
Total Placement	728	280	332	193	105	194	187	33	28	38	2143
Private N	144	162	29	106	5	52	48	29	28	38	641
%	19.78	57.86	8.73	59.92	4.76	26.80	25.67	87.88	100.0	100.0	29.91
Government N	584	118	303	87	100	142	139	4	0	25	1502
%	80.22	42.14	91.26	45.08	95.24	73.19	74.33	12.12	0	39.68	70.09

Session 2016-17											
Total Placement	791	303	422	92	115	354	123	21	34	25	2280
Private N	184	122	68	31	8	181	65	12	34	25	730
%	23.26	40.26	16.11	33.70	60.96	51.13	52.84	57.14	100.0	100.0	32.01
Government N	607	181	354	61	107	173	58	9	0	0	1550
%	76.74	59.73	83.89	66.30	93.04	48.89	47.15	42.86	0	0	67.98
Session 2015-16											
Total Placement	788	333	406	77	77	311	260	93	102	104	2551
Private N	167	101	85	4	20	80	47	60	35	22	621
%	21.19	30.93	20.93	15.19	25.97	25.72	18.08	64.52	34.31	21.15	24.34
Government N	621	232	321	73	57	231	213	33	67	82	1980
%	78.81	69.67	79.06	94.80	74.03	74.28	81.92	35.48	6569	78.8	75.65

Source: **AICTE Website; Website of the Institutions; office Records.**

Note: **IDC Survey Data, 2019**

Table:1 records the placement data of the students in the field of technical and professional education for the last three academic sessions. The data were obtained from three sources viz: AICTE Website; Website of the institutions; and from the official records of the institutions.

Academic Session 2017-18: Out of a total of 2143 placements, there were 29.91% from Private and 70.09% placements from Government Universities.

In comparison, the number of placement was higher in the subjects of Mechanical; ECE, and Hotel Management.

- In Government Universities, higher placements are reflected in the subjects of CSE, ECE, IT, Civil, and MBA.

- In the field of Architecture, and Pharma, 38 placements are recorded only in Private Universities.

Session 2016-17: In all, a total of 2280 placements were recorded. Out of which 32.01% placements in Private and 67.98% placements were recorded in case of Government Universities. A high percentage of placements were observed in the subjects of Civil, MBA, Hotel Management, in Private Universities. In Government Universities, higher placements were observed in the subjects of CSE, Mech., ECE, EEE, and IT during the session.

Session 2015-16: Out of a total of 2551 placements, except in Hotel Management, the number of placements was higher in all the subjects in Government Universities which was 75.65% as compared to 24.34% placement in Private Universities.

During the last three academic sessions, the percentage of placement in technical and professional courses was higher in Government Universities as compared to the rate of placements in Private Universities/Institutes.

- A decline in the placements in case of Government Institutions during the last three sessions.
- The trend of placement showed fluctuations in the rate of placements concerning Private Universities.

In the present study, the lower employability of technical and professional graduates in the Private University/Institutions may be linked to:

Lack of:

- Relevance and suitability of curriculum of professional courses to the global market;
- Innovative practices in teaching;
- Multi-disciplinary courses;
- Weak linkages and interaction between industry and academia.

To add to this data reveal that the focus is more on theory, and less on hands-on experience; and limited options to choose from.

The curriculum has little if at all, provision for imparting training in essential hard and soft skills to the graduates in their respective fields.

As per the database of AICTE (2017-18), a total of 37% of Engineering graduates were placed.

India Skills Report (2019) revealed that the employability of graduates in Engineering courses is between 60.18% to 60.63%, while 43% of Engineers remain unemployed from technical institutions. The report also highlighted:

- Drop by 3% in the employability of MBA graduates.
- 12% drop in the employability of B.Pharma. graduates.
- Overall employability of Engineering and Professional graduates is 57%.
- Engineering courses linked with industry or corporate through internship or training score high on employability.

India Skill Report further points out the fact that employability is linked with good quality talent. The most preferred skills in order of ranking are:

- Communication skills.
- Adaptability.
- Learning agility.

Non-technical skills demand:

- Interpersonal skills.
- Emotional intelligence.
- Conflict resolution.

A survey conducted by Financial Times: "2018 FT MBA Skills Gap Survey" highlighted the requirements of the employers concerning Leadership qualities. These include:

- Decision-making capacity to think critically.
- Act creatively.
- Negotiate perspectives.
- Work on the team.
- And be self-aware.

The lower employability of technical and professional graduates may be due to the lack of linkage between industry and internship. The numbers of internship seekers are high, and opportunities are a handful: demand is 84% and supply 37%.

Policy Planning and Implications and Recommendations

Qualitative Aspects: Academic Qualification of the Teachers

- To maintain a high standard of quality in teaching and learning, the institutions need to pay UGC scales to the teachers, to attract adequately qualified faculty in the institutions. But, all it requires is the availability of adequate resources.

- Due to financial crunch, the Government/State-owned Universities need to start cost recovery measures (as suggested by various Committees) in the form of levying higher rates of student fees; and also approach the external sources for fundraising; accepting voluntary donations from the Philanthropists, the alumni, etc. and invest for higher returns of income to fulfill the ever-increasing financial requirements.
- Investment in the promotion of research programs: Maintaining quality in higher education has its rewards. To enable the University/Institutes to compete with the world-class universities, the Management in the Government as well as in the Private Universities needs to create a better ambiance for research by providing greater flexibility to promote research activities among the teachers and the students.
- The Universities have the research potential, and the industry can provide financial support to carry out research befitting their needs and requirements for bringing about desirable changes in the system.
- For the Promotion of Research: University-Industry consultancy, and University-Industry collaboration has to be a Joint Venture to gear up the research activities to fulfill the requirements of the Industry.

Policy Implications

In the field of professional and technical education, to be adequately trained, market-ready skills in the field of Engineering and Technology are essential for the graduates. As of today, there is a need to focus more on the practical aspects, mandatory summer internships, to help the engineers connect with the needs of the industry and society. This will help to reduce the mismatch between the expected quality inputs, i.e., hard and soft skills to meet the demands of the market in the current situation. There is an urgent need for a symbiotic and synergistic relationship between the University and the Industry.

Given the lower employability of technical and professional graduates, there is an urgent need to offer industry-oriented internship programs: To focus more on providing necessary work-related technical (hard) and non-technical professional (soft skills); To prepare well-honed graduates; To use MOOCs to fill the gaps of a shortage of faculty and quality of pedagogy.

Digital Divide: Present Scenario

The abrupt closure of schools and colleges has thrown the educational

system of the country in chaos. The prolonged closure and uncertainty about the reopening had resulted in discontinuity of learning among the students. Online education has emerged as a preferred alternative to address this serious issue to assuage the varied impact of discontinuity of schooling. The decision to launch online education on a massive scale has neglected the crucial factors, i.e. accessibility of digital infrastructure. The order to ensure equal participation of students in online education, it is essential to take into account the digital divide which poses a severe risk of learning many students behind especially the Socio Economically Backward Students (UNESCO 2020). Even before the challenges brought by the pandemic – the issue of inequitable access to digital infrastructure emerged as a roadblock to accessibility and adoption of Online Teaching and Learning.

According to NSO data on access and use of the internet at home, the survey informs that:

- 24% in India of households had access to the internet, and 11% had a computer (including tablet) only).
- Only 46.4% had access to the internet while 16.2% had a computer in the state of Punjab.
- The spatial disparities are quite pronounced in these aspects of ICT only 40% of Rural Households have access to a computer with internet whereas 20% for Urban Household which is about five times that of Rural India.
- The most shocking aspect is that only 15% of Rural Households have access to internet devices, while over 42% of urban households have access to it. There is a need to look at students 91% of students specifically are the access behind from urban to digital infrastructure.

Access to the Internet among currently enrolled students

- In Urban India, 44% had access which is higher than that of Rural India, which is only 17%.
- Does the question arise how we can make online education inclusive where 91% of students do not have access to the internet and computer?
- Apart from the Urban-Rural Divide in India, there exists a gap in digital literacy also. NSSO's 75% Round Station/Survey Data (2017-18) reported a significant gap in the ability to operate a computer and internet male and female population in Rural and Urban areas as shown in the table: 2

Table:2

	Urban		Rural	
	Male	**Female**	**Male**	**Female**
Ability to use the Internet	43.5%	30%	17.1%	8.5%
Ability to operate Computer	37.5%	26.9%	12.6%	7%

Source: Ministry of Statistics and Programme Implementation, National Statistical Office, 2019.

Nielson (2019) reported that:

- 70% of the Rural population does not have internet facilities in states like West Bengal, Bihar, Jharkhand, and Odisha.
- NSO Data reveals that only 23.40% of households have a computer only in Urban areas while Rural households are 4.40%.
- It is essential to identify the challenges in the current scenario for higher education.
- Covid-19 has negatively impacted the internship offers as students are finding it hard for research opportunities which play a vital role in Inter-Disciplinary Research.
- The institutions are finding difficulty as in the case of technical and professional courses as well as in disciplines of Management and Commerce where students have to do internships with industry as part of the requirement of time.

Campus placements have taken a hit amid the uncertainty in the academic calendar in the higher educational institutions due to the Covid-19 pandemic:

- Job offers are on hold due to the economic slowdown, which has learned youngsters anxious. The pharmaceutical industry wants candidates to join at earliest, which is like a silver lining while Hospitality and tourism sector is however bleak. IT Sector is in watch mode and is in wait for candidates to join. The Covid-19 pandemic has delayed their joining due to slowdown.

- IT sector will cover the list faced by Hospitality and Service sectors.

Even before the Covid-19, the graduates were facing bleak prospects in placements. But now after the closure of Universities, canceled job interviews caused economic Havoc. Many firms have deferred graduate recruitment drives. Some are evaluating plans for the job offers because of the current situation. The type of skills in demand are changing not just due to pandemic.

According to a survey conducted from FirstNaukri.com over 1300 students across campuses in India, reported that the pandemic had hit placements 82% colleges. 74% pre-final year students. The companies have deferred the joining dates revealed 44% of the graduates who have job offers.

- According to the Centre of Monitoring Indian Economy (CMIE), the unemployment rate in India has swelled to over 23%.
- 70% of the students have already enrolled in re-skilling online courses. Out of 125 companies, 56% would hire fewer students as compared to last year.

Conclusion

The coronavirus pandemic has created an opportunity as a positive step to move towards digital education. As we all are aware of the fact that this pandemic situation will take time to shift back to offline mode of teaching and learning, so virtual education has to be the preferred method in this situation. It is necessary to focus on gaps in digitalization in higher education that are highlighted by the pandemic. Higher education institutions must invest in providing digital infrastructure to students to overcome the disruptions caused by the COVID -19 and reduce the digital divide for accessibility. This transformation is challenging, which is pushing the educators to re-examine the system to empower the youth with the right knowledge and skillsets needed to compete in the global market.

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