

Accreditation of Self-Financing Technical Institutions in India: A New Perspective to Improve Quality

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Abstract: This paper presents an overview of the Indian technical education system and upholds the importance of accreditation in the improvement of quality. The advantages of National Assessment and Accreditation Council (NAAC) and National Board of Accreditation (NBA) accreditation system is outlined in a brief way with an emphasis particularly on the self-financing institutions. It identifies the reasons of very low level of accreditation work completed by the NBA since its inception. The paper points out some shortcomings in the policy rating scheme followed by NBA. Some important recommendations have been made to render the accreditation system more effective and acceptable to various stakeholders of the technical institutions in India. If these recommendations are implemented, not only it helps in the accreditation of a large number of technical institutions in India but also improves quality of higher education in a very competitive way.

Keywords: Accreditation, Self-financing technical institutions, Quality assurance, Self-assessment report, Higher education,

1. Introduction

India's higher education system is the third largest system in the world and has grown exponentially. The last three decades have witnessed a proliferation of technical

institutions of all types in India and a resultant decline in the quality of education given by the majority of these institutions. With significant expansion of higher educational institutions in India, both public and private funded, a mandatory and robust accreditation system is required that could provide a common frame of reference for students and other stakeholders to obtain credible information on academic quality across institutions. The challenge is to ensure its quality to the stakeholders along with the expansion. Monitoring the performance of these institutions with regard to their effectiveness of operations and quality of products has become an urgent need for the sustainable development of the technical education sector in this country. Also, the globalization and liberalization of the economy has created avenues for the international mobility of engineering and other students, graduates and professionals with degrees and education of an internationally acceptable standard. These circumstances have led to the concept of accreditation of higher and technical education institutions/programmes.

Accreditation represents a process of quality assurance and improvement of a programme. A programme of an approved institution is critically appraised to confirm it continues to meet and/or go beyond the norms and standards as prescribed by regulatory bodies periodically [1]. The attributes of any accredited course enjoy the benefits like; quality improvement initiatives by institutions; increased best ranked student enrolment; ease in getting external funds for growth of the institution; taking up challenging societal issues through consultancy; graduate employability; facilitates transnational recognition of degrees and mobility of graduates and professionals; motivate the faculty to participate actively in academic (institutional/ departmental level) activities to produce high quality technical manpower. Henceforth,

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directly or indirectly the country's economic status increases with the help of sound and challenging academic environment created by the institutions.

The significance and benefits of accreditation are that, the institutes are accountable to public and demonstrate the commitment to excellence, which in turn strengthens the consumer's confidence. It helps to recognize the achievements, facilitates continuous quality improvement and faculty morale. Also, it helps the institution to know its strengths, weaknesses and opportunities. In addition, it helps the institution a new sense of direction, identity and to get funding. Finally, it helps to provide society with reliable information on quality of education offered. One of the best ways for ensuring quality in higher education is the system of accreditation, whereby, a central body or multiple bodies of repute accredit an institution's academic rigor and other aspects.

The basic hurdle in improving quality in most institutions does not understand or appreciating the actual concept of good quality education across the spectrum of institutions in the country. There is no significant discussion within institutions on improving the quality research, far from it, even raising the levels of teaching and learning are not an area of focus. In many cases this is only a matter of exposure. While even applying for an accreditation process, an institution is forced to undergo certain processes of self-assessment that throws light on the various aspects of quality. Usually, the process of application energizes the institution and faculty members to look at their performance critically, thus orienting them towards producing better quality output.

2. Current Status

The current status of higher education is presented in both quantitative and qualitative point of view in this section. Also for completeness, the most important and the approved plan of action of AICTE is to improve the quality of higher education is discussed. At the end, an attempt has been made to list the current status of NBA accreditation procedures and its shortcomings.

A. Present Status of Quantitative Aspects of Higher Education:

Indian higher education is in a dire need to improve the quality and transparency of its higher education institutions on students, economy, and society (UGC 2003). The growth in number of universities and colleges in India between 2008 and 2016 is provided in Table 1. The dramatic growth in Indian higher education can be witnessed from the table. However, this expansion has come at the cost of quality which in turn has resulted in many students graduating with credentials without any job relevant skills-set.

Table 1. Growth in Universities and Colleges in India (2008-2016) [2]

Institutions	2008	2016	Increase	
			(#)	(%)
Central Universities	25	47	22	88
State Universities	228	345	117	51
State Private Universities	14	235	221	1579
Deemed-to-be-Universities	103	123	20	19
Colleges	370	750	380	103
Total	23,206	41,435	18,229	79

The number of "State Private Universities" increased from just 14 to 235 in eight years with an increase of 1579%. These institutions are enacted by the state legislature but funded by private promoters (often business groups). During the same period, India added over 18,000 new technical colleges, which are mostly self-financed and affiliated with universities that conduct tests and award degrees.

Table 2 shows the growth in student enrolment by level of education and field of study in India during the same period, 2008-2016. In eight years, number of students in Indian universities and colleges doubled to reach 28.5 million students, which is with an increase of 109%. In addition, it can be observed that the growth in master's and doctorate level are slower than the overall enrolment growth. Further, it is noticed that the enrolment in Engineering/Technology programs increased by over 270%.

Table 2. Growth in Student Enrolment by Level of Education and Field of Study in India [2]

Level of Engg. Education	2008	2016	Increase	
			(#)	(%)
UG	11,908,151	24,593,321	12,658,170	107
PG	1,489,685	2,764,886	1,275,201	86
Ph. D	95,872	180,957	85,085	89
Others	148,100	945,582	797,482	538
Total	13,641,808	28,484,746	14,842,938	109
Field of Study	2008	2016	Increase	
			(#)	(%)
Arts	5,875,532	10,271,296	4,395,764	75
Engg/Tech.	1,313,706	4,885,134	3,571,428	272
Science	2,612,406	5,417,464	2,805,058	107
Commerce/Mngt.	2,486,901	4,637,317	2,150,416	86
Education	286,478	1,085,876	799,398	279
Medicine	446,087	1,118,178	672,091	151
Others	620,698	1,069,481	448,783	72
Total	13,641,808	28,484,746	14,842,938	109

Presently, accreditation is not mandatory and there is no law to govern the process of accreditation. It is expected that with the passage of the legislation to provide for accreditation of higher educational institutions and to create a regulatory authority for the purpose, many of the remaining quality issues will be resolved, for some time to come. Table 3. gives the current status of technical institutes accredited in India by NBA. The data is compiled from the NBA website as on May 2019.

Table 3. Current Status of Technical Institutions Accredited [3]

S. No	States	Accredited	
		No. of Colleges	No. of Programmes
1	Andhra Pradesh	18	121
2	Arunachal Pradesh	2	7
3	Assam	2	15
4	Bihar	1	5
5	Chandigarh	2	11
6	Chhattisgarh	1	6
7	Delhi	2	6
8	Gujarat	2	11
9	Haryana	5	26
10	Himachal Pradesh	2	10
11	Jharkhand	2	15
12	Karnataka	16	144
13	Kerala	2	16
14	Madhya Pradesh	3	16
15	Maharashtra	16	97
16	Odisha	5	32
17	Punjab	5	27
18	Rajasthan	2	10
19	Tamil Nadu	43	258
20	Telangana	7	37
21	Uttarakhand	2	4
22	Uttar Pradesh	5	27
23	West Bengal	2	13
Total		147	914

It is understood that the number of accredited technical institutions is very poor and at this rate, it would be impossible to achieve the national goal of accrediting 50% of the technical institutions in India by 2022.

Along with the points discussed earlier, student faculty ratio is another parameter which quantifies the quality of higher education. For example, the student teacher ratio in India (24:1) is very low as compared to other countries such as Sweden (9.5:1) and United States (13.6:1). A low student teacher ratio indicates the burden on a single teacher of teaching multiple students as well as the lack of time that each student gets. Also, in an institution of higher learning, less number and overburdened teachers are unable to pursue any research or encourage their students to do so. Consequently, the culture of questioning and reasoning cannot be inculcated as a part of higher education in most of the institutions.

A. Present Status of Qualitative Aspects of Higher Education

Let us examine the status of the following qualitative major parameters, like : faculty, research and global ranking of Indian universities; which play very important role in determining the status of quality of higher education.

1. Faculty: Availability of good quality faculty is a critical input in the functioning of a sound higher education system. While there has been a consistent growth in the faculty strength in higher education, it has not matched with the growth in student enrolment numbers. The student teacher ratio has come down from 15 to 25 [4]. This has also led to the country's poor performance on student-teacher ratio.
2. Research: Research is an essential component of a higher education system to ensure it remains vibrant and is quick to respond and anticipate changes arising in the contextual conditions. One of the input parameters to ascertain progress in research is the quantum of spending on research and development activities. The expenditure on R&D is less than 0.78% in India and about 4% in Finland. This reflects the importance given by a nation to develop its technological capacity.
3. Scientific Publications: A comparison among various developed countries and India with respect to scientific publications, ranked 9th in the world [5].

B. Present Status of AICTE Approved Plan

AICTE, with a view to improve the quality of technical education and thereby enhance the employability of engineering students, the ten point action plan has been finalized and field tested in few institutes as a pilot project [6]. The ten point plan include planning; selection; induction training; revision of curriculum; mandatory internships; industry readiness; promoting innovation/start-ups; exam reforms; training of teachers; and mandatory accreditation. The feedback and results in those few institutions were very good and encouraging. Hence, it has been decided by AICTE to implement the same in all technical institutions from the academic year 2018.

C. Analysis of Protocol and Procedures of NBA [7]

1. Some strong points in the protocol and procedures followed by NBA are listed below:
 - NBA has reviewed the accreditation system periodically to link the process with the resource through quantitative assessment [8].
 - NBA is a unique statutory body in India which accredits a large variety of UG and PG programmes. NBA is the only agency that accredits multi-disciplinary programmes in the world [9].
2. Some weaknesses needs attention: Although the overall accreditation process adopted by NBA is in line with the process followed by other agencies all over the world, it still suffers from few shortcomings which are self-explanatory. These have been identified through a critical study of various documents available in the manual of accreditation and are as follows:

- Accreditation process is voluntary and highly time taking.
- Discrepancies in existing accreditation criteria and parameters.
- Programmes are assessed on the basis of aggregate score.
- Composition of peer team and training of team members
- Dealing with shortage of assessors vis-à-vis capacity building.

3. Challenges

With the emergence of India as a knowledge-based economy, human capital has now become its major strength. This has put the spotlight on severe inadequacies of India's infrastructure for delivery of higher education and our universities have to rise to the occasion to meet the needs of Indian society in-line with international standards.

Unfortunately in India, the accreditation of higher education institutions and programmes is optional and has not yet caught up as a trend. While NAAC and NBA accreditation gained momentum, the coverage of institutions is still less. Private universities and private colleges have shown little enthusiasm for accreditation. It means, effectively no standard national level monitoring system in terms of quality for most of the educational institutions.

A. Low Gross Enrolment Ratio

Though Indian higher education sector has shown impressive and exponential growth in the number of institutes and students enrolment in the country; it still faces challenges on the Gross Enrolment Ratio (GER). GER is less than 20% in India as compared with some of the developed economies, which is very high in the range of 55 to 90% (MHRD, 2016).

B. Shortage of Faculty

Government colleges generally have highly qualified professors with post graduate degrees and doctorate being a norm. The government pays the faculty well and also offers regular pay hikes. The professors are found to be trained in teaching and have profound subject expertise with several years of experience. Government college students report higher satisfaction levels in dealing with their lecturers for solving doubts, getting guidance for projects and connecting with alumni.

In private engineering colleges, the faculty may not be as good as government colleges. private colleges

employees are B.E. / B. Tech graduates as lecturers and have little or no teaching experience. Private colleges are also seen to suffer from the shortage of professors and lecturers resigning frequently.

Let us examine the reasons for this from Indian environment point of view particularly from 1990 onwards. Many of the young computer under graduates immediately after their graduation are able to get white collar jobs due to demand in western world. Because of their inherent IQ levels and sufficient service they are able to learn more in on-job environment and enhance their skill sets which enable them to settle well in developed world with handsome salaries. Whereas, for other programme graduates like civil, ECE, EEE, mechanical etc., they have temporarily taken some training and somehow could manage to get into software service oriented jobs. Finally, the under graduates who could not get into any job take up the teaching field as a stop gap arrangement.

This situation has been very well exploited by some private management who started self-financing technical Institutions with less paid faculty. Because of the poor IQ level of the faculty, neither they could manage to change over to better jobs nor they managed to enhance their teaching capabilities.

C. Acute Shortage of Doctoral Graduates

As the scholarships amount offered for doing Post Graduate or Doctoral Programs were so less, nobody is interested in doing Ph. D., except very low percentage of students, who are genuinely interested in research and teaching as their carrier. The mediocre faculty, who did Ph. D without any struggle, standards etc., in turn produced Ph. D's and that is how the most of the educational institutes research programs are suffered. In fact, they are unfit to supervise or do any kind of research work and spoil the whole environment. In addition to this, some of the genuine scholars who earned their Doctoral degrees have joined as head of the institution, the principal or head of the department and got bog down with lot of administrative work and useless student's petty quarrels etc., wasting lot of their valuable time. Further, to do research neither facilities nor encouragement is given by private management.

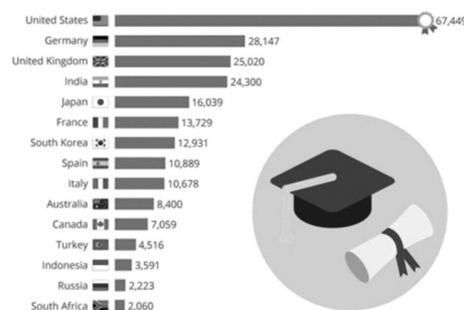


Fig. 1 The Countries with the most doctoral graduates (No. of graduates – all fields) in 2014 [10].

It may be noted that the number of doctoral graduates are much less than the demand which is also one of the main reasons for colleges not going for accreditation. Though it is a current status issue, has been deliberately omitted there and mentioned in this section to give sufficient importance. The Fig. 1 shows the countries with the most doctoral graduates (No. of graduates – all fields) in 2014 and it can be seen number of doctoral graduates are 24,300 in the year 2014 compared to the number of technical institutions, which are more than 40,000 in the same year.

D. Deficient and Low Quality Infrastructure

There are approximately 150 colleges which are closed down voluntarily every year due to strict AICTE rules. According to a AICTE rules, colleges that lack proper infrastructure and report less than 30% admissions for five consecutive years will have to be shut down.

But many complain that private engineering colleges often compromise on quality. Most private institutes have a major handicap of an acute shortage of quality teachers. Also, very few private institutes invest in developing research facilities. The material infrastructure in most private engineering colleges is inadequate while the human infrastructure that is, teaching staff is pathetic. Not only that, such colleges have no proper infrastructure, they also at times do not have a full-fledged campus. If there isn't decent infrastructure in colleges, they won't be able to turn out decent engineers. Henceforth, it is worth noting that AICTE has approved the progressive closure of more than 410 colleges across India, from 2014-15 to 2017-18.

E. Mindset of Private College Managements

Most of engineering colleges run by private management is always profit driven. They do not bother about either quality education or students career. In some of the states, the chairman and trustees of the management decide the fees every year with an enhancement of about 10 to 15% or more. Private engineering colleges are popping up in every nook of the city. Hence, it's difficult to give a common verdict for all. But several private engineering colleges established 5-10 years back, put up a lot of efforts in tying up (signing MOUs) with MNCs and other big companies. So these companies visit engineering colleges without fail and each of them are seen to recruit as many as 100-150 students in one go. There are several newly established private colleges, where no companies visit and students are left on their own to do the job hunt after graduating.

F. Outdated Curriculum

We talk about increasing funds, and infrastructure, but there is no improvement in the content of teaching in hi-tech classrooms. The most striking reason for India being a laggard is its outdated education system. In our country, 90

per cent of the universities have outdated curriculum and who recently have realized and started working. As per latest studies, only 8% of India's engineers are employable, once they graduate from college.

Curriculum overall can be defined as a composite component that includes a learner, a teacher, a teaching - learning methodologies, anticipated and unanticipated experiences, outputs and outcomes possible within a learning institution. Fig. 2 shows the effects of outdated curriculum. Due to the ill effects of outdated curriculum, the universities are exploring ways to revise the engineering curriculum in order to meet the changing needs of industry and society. Any restructuring of an engineering curriculum [11] must take into account the correlation between society, engineering competencies and the changing paradigm of engineering education. The “employability” of graduates depends on a combination of high technical knowledge, practical experience and soft skills.

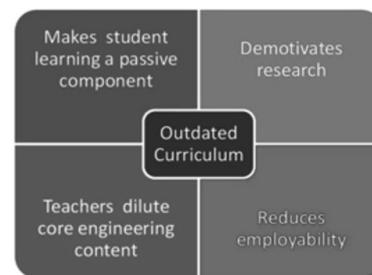


Fig. 2 The Outdated Curriculum and its Effects

G. Lack of Motivation for Faculty

An individual's motivation is influenced by both his/her expectancy of being able to succeed at the task and by the values he/she ascribes to complete it. Lack of motivation and commitment can have a negative impact on the student's learning and most importantly it put the future of children on the stake. Teacher's contribution in the human capital development and technological advancement greatly depend on their motivation and willingness for taking initiatives. There are several factors which affect the academician's motivation which includes class room environment, workload stress, rewards/incentives, and administrative policies etc. A motivated academician should be recognized by the high level of devotion, commitment, hard work, dedication and becomes a source of inspiration through his exemplary character because a teacher is always anticipated to be a role model of his students.

H. Lack of Innovative Practices in Teaching Methodologies

The lack of analytical thinking processes, lack of proper analysis of students for innovative thinking; less content

with the reality of teaching, the impact of students' learning motivation and interest; teachers on students ability to innovate lack of awareness are certain drawbacks of not having innovative practices.

I. TQM in Education

Higher education institutions have been facing challenges for some time and are expected to face more in the future. In the new environment that higher education has entered quality plays an increasingly important role. In the past decade, emphasis on quality improvement has been one of the most characteristic features of higher education in many countries. By now, total quality management has been adopted by many universities and colleges in the higher education world. Engineering education colleges and universities have no alternative but to follow and take advantage of the anticipated benefits that TQM has to offer. The eagle's eye of TQM in engineering education focuses on the elements like customer focus, management commitment, quality commitment, faculty involvement, success measurements, and continuous improvements.

1. Faculty and students biometric attendance: As many students are taking admissions without having any seriousness on studies, irrespective of their capabilities, just for the reason that the state governments are giving free scholarships. As they have neither interest nor the capability, do not attend the college regularly or study and spoil the entire educational environment. Therefore, to change the overall situation, it is recommended to implement biometric attendance in all technical institutions for students also. It may be noted that some of the institutions have already implemented this and observed that it has improved the students attendance and their participation. Similarly by implementing biometric attendance, the private management can't use same faculty in their group institutions and totally eliminates malpractices.
2. Faculty load allocation: It has been observed that many institutions are employing few faculty and forcing them to teach more number of courses as their work load. Lack of management understanding and thinking that a faculty working 48 hrs per week is loaded less than 50%, hence load them with more teaching. Ultimately, this is affecting the quality of higher education.

Some of the technical institutions have permission to run second shift polytechnic. The intentions of this is good to use the existing resources to train the diploma graduates and help many of the industry working people like industrial training institute (ITI) graduates, to enhance their skill set by attending classes in the evening shift. But in practice, it became another money spinner for these ever greedy self-financing institution managements. Most of the private institutions, it never runs in so-called second shift. It puts extra burden on existing faculty, who are already

overburdened. So, these faculty take things lightly and just manage or pass time being friendly with students, so that they do not complain. This is how the overall quality is getting deteriorated. Added to this most of the campuses are not residential, hence everybody is in a hurry to go back rather than taking care about second shift students. Therefore, it is more challenging to run these second shift courses in non- residential campuses and without paying extra incentives to faculty and staff. Unless these issues are taken care, it may not be possible to improve the quality of second shift programs.

J. Lack of High Tech & Digital Libraries

Most of the self - financing technical Institutions are not having high tech and digital library facilities. They are established for the sake of inspections and do not have proper internet connections. The system configurations are outdated. The inspection teams do not verify the same during their visits by proper checking all the systems and usage records etc. Also most of the cases libraries are not kept open beyond college timings as the institutes are not residential. Unless these facilities are improved, research activity can't be improved.

K. NAAC and NBA to Build Capacity

The NAAC and NBA are not sufficiently recruited to handle enormous amount of load in a consistent way, the quality of these technical institutions can't be improved. Most of the time these boards take a lot of time right from application to final decision making, which is acting as an impediment for any institute to go for accreditation.

L. Many Elite Institutions May Have Doubts and Inhibitions

The data of the technical institutions have been either ranked by NAAC or programmes are being accredited is much less. Unless IIT's and NIT's come forward in a positive way for ranking and accreditation, many of the technical institutions will not come forward to go this assessment. Most of the cases, they are afraid of that they might be exposed of their weaknesses. The only solution for this is to make the accreditation and ranking compulsory to all the institutions. In fact, a culture has to be developed which identifying the weaknesses is important for them to overcome their weaknesses in a more concerted approach and which in turn helps the institute to grow much faster and serve the society.

M. Lack of Public-Private-Participation (PPP) Models

Most of the colleges in India are supposed to be run under Educational Trusts with no-profit motive and to serve the society at large. Due to lack of checks, these educational societies are in practice running the Technical Institutions by collecting huge donations and making profit as sole

motive. By this the entire educational system is suffering with quality which has become money spinning / money minded and using these trusts to avoid taxes and hide lot of their black money. On the top of it, there is a huge demand for quality technical institutions and children are almost sacrificing their child hood to get admission into these premier institutions.

Therefore, it is all the more important to develop very good PPP models by experts after a lot of deliberations and is not within the scope of this paper. Unless it is done on war footing, some other foreign universities will come and establish and drain away lot of our foreign exchange reserves.

4. Proposed Solutions to Improve the Quality of Indian Higher Technical Education

A concerted effort is needed to ensure that quality informs every process in higher education. Any new scheme planned by the government must ensure that accreditation becomes mandatory and sufficient incentives and disincentives are built into the system to ensure that every higher education institution obtains accreditation. While even applying for an accreditation process, an institution is forced to undergo certain processes of self-assessment that throws light on the various aspects of quality. Usually, the process of application energizes the institution and faculty members to look at their performance critically, thus orienting them towards producing better quality output. Hence, in-order to improve the quality education, the following must be done on priority basis and are as follows :-

A. Multiple Regulatory Institutions

At present, multiple regulatory institutions like AIU, AICTE, UGC, NBA, NAAC etc., are working hard to improve the quality education and standards. Due to lack of permanent staff in these organizations these bodies may not be able to complete their work in time. There must be regional offices to coordinate all the accreditation works. The entire nation's manpower and faculty requirements in line with their specializations are its responsibility. Accordingly, they will be able to sanction the number of seats to each institute and University.

B. Mandatory Time Limit for Institutes and Programmes Accreditation

Generally, the NAAC team does the institute accreditation and the program accreditation is done by NBA team. Throughout the year institutions can approach these bodies and as soon as the application is reached within two months institute accreditation must be done, followed by program accreditation in another two months from the date of application. The fees for NAAC and NBA are so high compared to the apparent benefits management see,

must be drastically reduced. This encourages them to improve the quality of technical institutions, rather than running away from it.

C. Mandatory Institute and Programmes Accreditation

Accreditation has to be made not only mandatory, but it has to be done in two stages for the Institutes which are applying first time. In the first step, the institute must be accredited by NAAC and followed by programs by NBA. The reason for this is, many of the institutions are managing the show by bringing in the required manpower and equipment resources during the inspections on temporary basis.

D. Relaxation to Ph. D's Recruitment for Five Years

As shown in the earlier sections, technical institutions have grown at extraordinary pace in India and the number of doctoral graduates available are much less. Many of them are might have been retired or stuck with administrative jobs and are not really doing research and teaching. Under these circumstances, many of the self - financing institutions are adopting corrupt practices to fulfil the cadre ratio requirements of NBA programme accreditation procedures. Therefore, it has been recommended that for professors, Ph. D qualification requirement be relaxed for 5 years and the following criteria may be approved.

- M. Tech with 6 years' experience or 3/4 journal publications as first author, as associate professor.
- M. Tech with 12 years' experience or 5/6 journal publications as first author, as professor.
- Exceptional candidates with very good teaching / industry experience of more than 25 years as professor.

This move will enhance the quality of technical education, encourages the faculty to do research and publish papers. Also the private management will come forward to go for NAAC and NBA accreditation.

E. Faculty to Clear National Level Test to be Eligible

The regulatory body National Commission for Higher Education & Research (NCHER) or Union Public Service Commission (UPSC) must conduct twice in a year, national level faculty entrance test for those who are interested in taking teaching as their profession along with interview. These candidates must be having first class with distinction throughout their carrier. Every year increments and promotion to next level must be linked to teaching evaluation, publications and / or consultancy work. The affiliating universities must make sure that all faculty recruitments are only through university nominated committees. This must be made applicable to all types of

technical institutions and universities and deemed to be universities.

F. Technical Institutions Campus to be Residential

All technical institutions must be residential. Then only a good environment can be created for academics and research environment. It is not possible to do dedicated research work unless faculty and student stay in same campus and available 24 hrs. Not only research, even to implement the recently approved AICTE action plan to improve the quality of academics, the campuses of all types of institutes and universities must be residential. In a metropolitan environment, a student or faculty is losing a lot of energies in commuting and attending for personal and family needs. The IIT's and NIT's are the best examples for this.

G. National Level Student Entrance Tests

There must be one examination at national level. Based on the intermediate and examination, an all India rank will be generated. All admissions must be done based on this all India rank, centrally for all technical institutions. The conduct of examination, all India rank generation and seat allotment must be entrusted to either IIT's or UPSC., to avoid any malpractices.

H. Student Scholarships and Finance Assistance Schemes

Any student is entitled for scholarship and respective state governments may pay to them directly. All students are entitled for bank loans for tuition fees, examination fees, maintenance and boarding fees. Tuition fee, examination fees will directly go to the institute and boarding and maintenance fees to student account. The loan period will be double the duration of course period. It is the student's responsibility to pay all his fees. The respective state governments will give guaranty to banks for loan clearance under their social welfare schemes. Banks will keep the certificates of all the students who have taken loan and return back to them after the loan is cleared. The advantages of this scheme is no student is denied of an opportunity to study. Nothing comes free; thereby he will be more responsible to perform well.

5. Conclusions

This paper presents the present situation of technical institutions and examines the deteriorating quality of higher education. Also, it examines the current status of technical institutions ranking by NAAC and programmes accreditations by NBA. The paper identifies several challenges being faced by self-financing institutions. So as to improve the quality of technical institutions, it proposes several actions. Also, so as to improve the status of these technical institutions accreditations by NAAC and NBA, action specific recommendations are given. The paper

particularly recommends the relaxation of doctoral graduates requirement for 5 years, so that accreditation work will be in progress, there by quality of these institutions are improved and many faculty are encouraged to do research and publish papers in journals. At the end, the paper also recommends certain time bound procedures for NAAC and NBA so that by the year 2022, large number of institutions accreditation is done as per national goal. Finally, the paper recommends few important and radical changes to be implemented in all self-financing technical institutions so that overall quality of higher education in India improves.

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