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ACADEMIC EXCELLENCE IN TECHNICAL EDUCATION THROUGH ACCREDITATION AND QUALITY AWARD MODEL ▲

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ABSTRACT

This presentation identifies the quality related issues in Higher Technical Education in India due to exponential growth in the number of colleges and students enrolled in last 15 years. This has resulted in degradation of Quality particularly because of acute shortage of the talented faculty resources. Therefore, it identifies accreditation as a quality enhancement strategy listing the difficulties and problems associated with the National Accreditation processes through NAAC and NBA. It suggests an alternative route through National Quality Award Model, which can be used for the purpose of not only accreditation, but also combines benchmarking, self-assessment and peer assessment. As a specific case of UP Technical University Academic Excellence Model being implemented in UPTU. It describes the detailed model structure and its formats and possible application of the model to enhance the quality is outlined.

Keywords: Academic Excellence, Technical Education, Quality Award Model

Introduction

In past twenty years or so, we have witnessed a tremendous growth in the number and size of technical institutions in the country mainly in the private sector. While it is a welcome sign in what was once essentially perceived as a social sector, its main impact would be felt only if the quality of these graduates and their 'employability' was very high. Unfortunately, in this 'rapid' quantitative expansion, quality could not remain as the main concern and 'acute' faculty shortage of right calibre, commitment and sincerity became a major crisis in running the institutions along the quality lines. Some major imbalances that have resulted in this process of rapid expansion are:

- Regional imbalance in the location of technical institutions. There are heavy clusters in some part of the country and very low else where.
- Branch-wise imbalance with almost 80% new seats created are confined to nearly 20% of the branches of engineering-that too in a very narrow band of fields essentially variants of computers & IT, while the core engineering subjects, vital for development such as Civil, Architecture, Agricultural Engg., Metallurgy, Chemical, Mechanical, Paper & pulp, Leather and sugar technology are hardly perceived with enthusiasm in creating the capacity.
- Imbalance between degree : diploma institutions. There is now more focus on degree enrolment than in diploma in many states. Thus there are shortages and surpluses of skill-sets needed.

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▲ Key Note Address

- Public-Private participation imbalance-Nearly 95% of the expansion in the technical education is in the private sector with public funded institutions in various states showing hardly any sign of growth. Faculty adequacy and facilities in many of the state funded institutions is a cause for serious concern. The main success factor for them is still the higher calibre students they are able to attract due to lower fees and perceived public confidence.
- Compensation package imbalance where industry pays in the beginning a package that an academic gets at the end of his/her entire service life. This has seriously eroded the 'attractiveness' of teaching and research in engineering & technology as a soughtafter career option and there is a 'famine' like condition of talent for teaching and research. This I perceive as the biggest single cause for concern. Even in the same privately funded institution, there is tremendous imbalance in pay structure of 'Director/Principal' and the fresh lecturer with ratio's as high as 10 or more.
- Age-structure imbalance – we come across faculty which is either 20 plus or 60 plus-re-employed retired professors from reputed govt. colleges/institutions and a balanced age profile with strong middle cadre is missing.
- Imbalance of short-term goals taking precedence over long term one. Quick return on capital employed leads to myopic perception in decision making.

Emergence of Knowledge Society and the Indian Potential

In the current global scenario, with the emergence of knowledge society when the world is shrinking to be a global village and geography is increasingly becoming a history, India can be the most dominant knowledge super-power because of its tremendous intellectual potential by virtue of its superiority. I believe, future of India is a new form of IT-'Indian Talent' irrespective of whichever branch of engineering and technology, because in future there is going to be a great demand for all kinds of technical talent. Thus it is a critical moment for us to take lead in becoming a major player in the emerging knowledge society. Quality is the key to that success. However, quality today is the major constraint due to 'low immediate employability' of our graduates as perceived in various surveys. If we miss this opportunity again, it would be sad. Hence we need to balance quality with quantity, short term goals with long-term goals to ensure that we use our inherent capabilities to be the knowledge super power for the following intrinsic strengths that we have :

- We are the largest democratic country with more than 65% of our population being less than 35 years of age. As a youthful nation, if we produce technical manpower of quality, which is globally employable, India could be a major talent pool for the world in 'addition to meeting its own developmental needs.
- By nature, we are very innovative, creative, analytic, curious and 'intelligent human resource'. We can find very innovative solutions to complex problems provided we find a purpose in it. If motivated and committed, we can be truly innovative and creative. This is a major asset in promoting innovative research and development.
- India had a glorious past as knowledge seekers from the world were attracted towords India-Nalanda is a case in point. We need to regain that past glory and if given right priorities to E-R-P (Education, Research & Planning) which requires intellectual capital as a resource input, we could become a major knowledge hub and R&D centre globally.

Indians make great parents and they all have the desire and ambition to get a good quality education to their children and are willing to sacrifice their personal comforts for it. Thus there is enormous demand for good quality education and Engineering is still a sought after career option after 10+2. Hence, bright pupils in large numbers are available in search of quality

institutions. This is a positive demand environment.

Accreditation : A Quality Enhancement Strategy

Foregoing analysis reveals that accreditation can be a very powerful strategy in the quality management process. Accreditation provides a quality assurance to the stake holders and enables students to decide if they would like to join a particular institute in a particular program.

Table 1

EDUCATIONAL REQUIREMENTS OF THE KNOWLEDGE ECONOMY	
PAST REQUIREMENTS	**FUTURE REQUIREMENTS**
•Skills	•Knowledge
•Product-centric	•Learner-centric
•Graduate	•Life-long learning
•Cost of doing business	•A competitive advantage
•Passive participation	•Active participation
•Just-in-case	•Just-in-time
•Static content	•Customized content
•Mandated	•Self-directed
•Instructor-led courses	•Library of learning methods

Accreditation Agencies in India

Three major agencies for accreditation purposes are:-

1. NAAC
2. NBA of AICTE
3. NABCB of QCI- this does accreditation of certifying bodies for ISO certification for QMS, EMS etc.

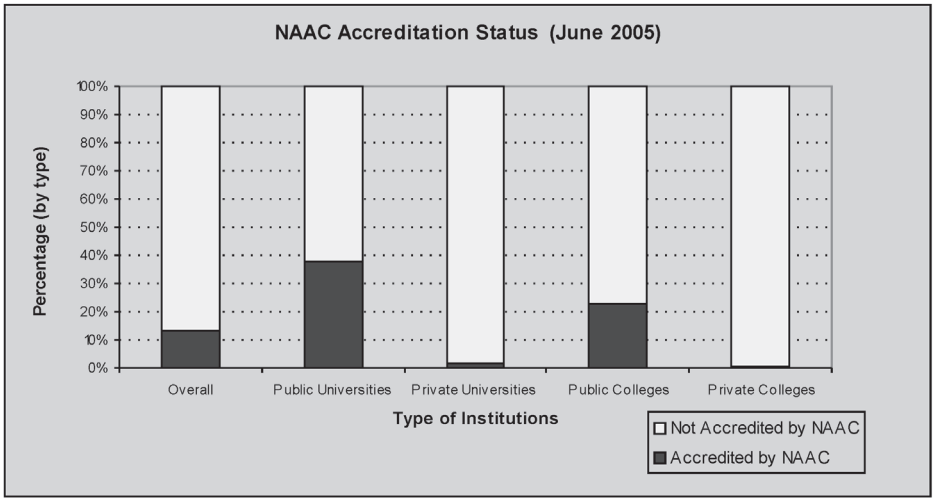

Figure 1:

* - Includes 21 Re-assessed and 121 Re-accredited Higher Education Institutions

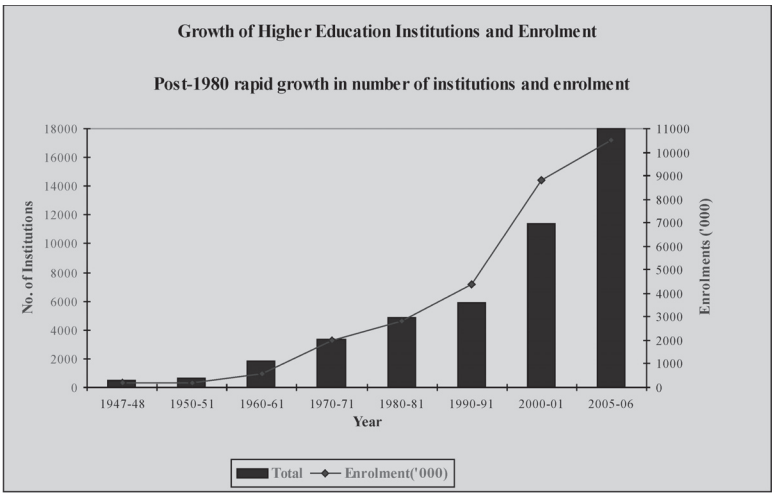

Figure 2:

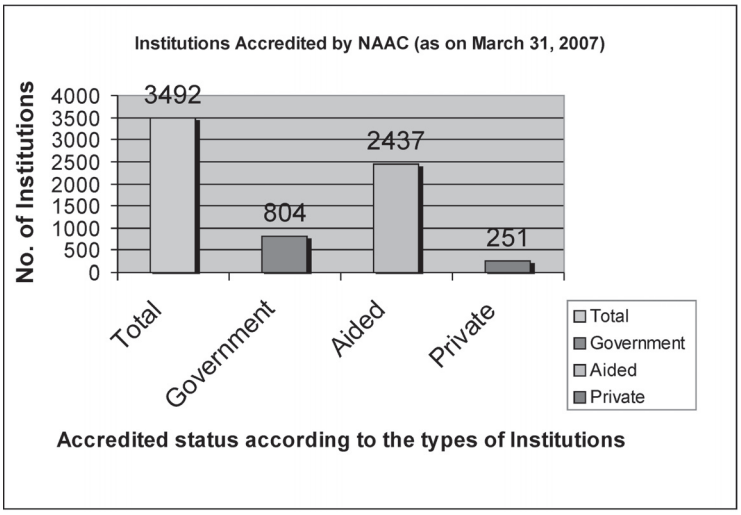

Figure 3:

Grade – wise Analysis of Accredited Institutions (as on March 31, 2007)

Table 2:

Old Grading System - 5 point scale (Upper limit exclusive)			
Grade	***Universities***	*Colleges*	*Total*
A*****?(>= 75)	19	21	40
A****?(70 – 75)	22	35	57
A***??(65 – 70)	05	20	25
A**?(60 – 65)	01	04	05
A*(55 – 60)	-	01	01
Total	**47**	**81**	**128**

New Grading System – 9 point scale(*upper limit exclusive*)

Table 3:

New Grading System – 9 point scale *(upper limit exclusive)*			
Grade	***Universities***	***Colleges***	***Total***
A++ (95 – 100)	02	-	02
A+ (90 – 95)	04	51	55
A (85 – 90)	19	256	275
B++ (80 – 85)	31	619	650
B+ (75 – 80)	23	857	880
B (70 – 75)	10	851	861
C++ (65 – 70)	03	419	422
C+ (60 – 65)	01	248	249
C (55 – 60)	-	110	110
Total	**93**	**3411**	**3504**

Number of Institutions above 75% - 1902 (i.e., A*****, B+, B++, A, A+, A++)

In the domain of higher education system, NAAC and NBA are the two major accreditation agencies in India. The accreditation process is based on the principles of self-assessment and peer reviews.

In the U.S., the concept of accreditation started in 1950's to qualify institutions and programmes for federal grants and loans. It has evolved there over the years in response to changes in the higher education environment. The number and diversity of accrediting organizations has grown and over 100 accrediting organizations exist.

Thus accreditation of Indian higher education system is still in its nascent stage. The % coverage of accredited institutions and programmes by NAAC and NBA are very small fraction of total number of such institutions and programmes. NAAC accredits institutions while NBA accredits programmes. There is perhaps a need to have a combination of the two alternatives.

In the context of Washington Accord to which now India is nearly in, the need, role and the process of accreditation needs to be re-emphasized and revisited. While it is an opportunity to show case Indian Talent's quality to the outside world, it is a major challenge because the credibility of the accreditation process itself needs to be established.

Major Challenges in Accreditation

1. Lack of emphasis on accreditation, particularly by private institutions.
2. Non-availability of right kind of resource persons for participating in the process of accreditation.
3. Local pressure groups within the teams-heterogeneous perceptions within the group
4. Credibility information of supplied.
5. Halo effect-for example a good hospitality may possibly colour the view of the team, or vice-versa.
6. Psychological pressures on the visiting team. Since decisions have to be finished right on the spot and strengths and weaknesses to be enumerated and either due to leakage of

internal information by any team member or the body language reading, the team may be under enormous pressure for an honourable exit from the place.

7. Lack of perceived outcomes of the accreditation. There is very little evidence that after accreditation the quality perceptions or funding or enrolment quality has substantially gone up.
8. Credibility of results in public perception even drastic changes in rating scale (e.g. of NAAC)
9. Delays in the process of accreditation.
10. Conflicting ratings by magazines and the accreditation agencies.

National Quality Award Model: As Alternative Route to Promote Accreditation

As an alternative route to promote accreditation one can explore adopting the National Quality Award model framework-suitably adapted to fit into the academic environment. The same structure could be used for programmes as well as institutions by appropriate interpretations of model structure to suit the level at which it is applied with this programmes as well as institutions could be accredited. Benchmarking with the best in the class is also possible.

UPTU Academic Excellence Model : A Case

The rapid growth of Technical Education sector in our state during the last eleven years, both in terms of number of institutions and intake capacity, was perhaps necessary to retain inter-state migration of our students; but in the process some compromise was made with the quality of education. It is therefore necessary to consolidate and ensure quality education now, so as to provide world-class technical manpower and to usher in technology-driven economic development in the state. It is time to generate healthy competition among these institutions and provide incentive for performance in Academic Excellence and Human Resource development. As such, UP Technical University has established UPTU Academic Excellence Award (UPTU-AEA) from this year with a view to visibly reward Excellence in Academic Achievements. Same model can be used for the purpose of accreditation.

Academic Excellence Award Model

The Excellence Model is a non-prescriptive framework based on ten criteria. Five of these criteria are 'Enablers' and remaining five are 'Results'. The 'Enabler' criteria cover what an institution does. The 'Results' criteria cover what an institution achieves. 'Enablers' cause 'Results'.

The Model which recognizes that there are many approaches to achieving sustainable excellence in all aspects of performance, is based on the premise that:

Excellent results with respect to Performance, Customers, People and Society are achieved through Leadership driving Policy & Strategy, People, Partnerships & Resources, and Processes.

The Excellence Model is presented below in a diagrammatic form :

The model is dynamic in nature. The innovative strategies and processes together with continuous learning helps to improve enablers that in turn lead to improved results. The Model's ten boxes, shown above, represent the criteria against which an institution's progress towards excellence is to be assessed. Each of the ten criteria has a definition, which explains the high level meaning of that criterion. To develop the high level meaning further each criterion is supported by a number of sub-criteria. Sub-criteria pose a number of questions that should be considered in the course of an assessment using a 5 point Likert scale. This is innovative aspect which automatically converts perceptions into numbers.

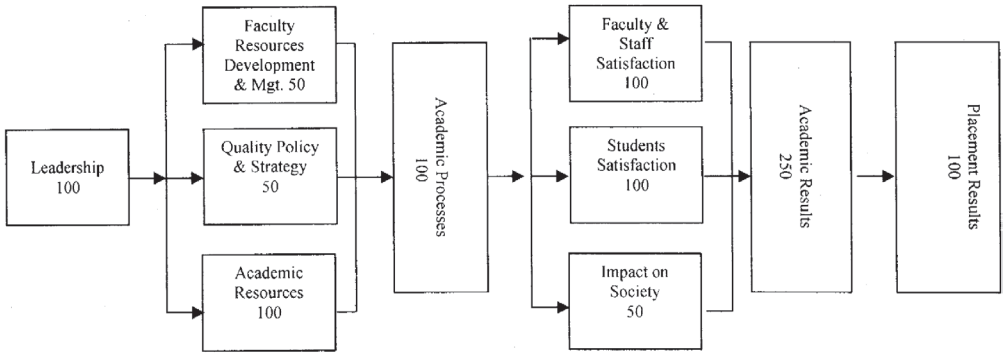

Figure 4:

Some Key factors for excellence are elaborated as follows:-

- **Commitment** of top management, administration and faculty to Quality and Academic Leadership. In order to ensure sustainable Quality of Teaching- Learning in the Institution, the commitment must follow the water -fall model and should flow from the top. In an excellent Institution the results show positive trends and/or sustained good performance. Targets may be set by the management with a commitment to meet or exceed them. Performance may be compared internally and with other Institutions, particularly against best in the region and/or world class. The cause and effect link between approaches adopted and results achieved will be clear. It helps in understanding and identification of improvement opportunities, and the results may be segmented for example by the Director or by the department.
- To have **Academic processes** in place with a clear Quality Policy & Strategy. To achieve desired results covering the performance of the institution, both financially and operationally, and the perceptions of all of its stakeholders, it is necessary to have a well defined Quality policy which is clearly understood by all concerned. This should be followed by enforcing duly monitored Good Academic Practices. The Institute should plan and develop an integrated set of sound approaches to deliver the required results both now and in the future. It should deploy the approaches in a systematic way to ensure full implementation. Excellent Institutions will have sound approaches. A sound approach has a clear rationale that focuses on the Institution's current and future goals; is delivered through well-defined and developed processes, and has a clear focus on the required competencies for the employability of the students.
- **Resources** – physical, financial human & academic – all of them in adequate number and quality. Having quality resources in sufficient number is a necessary, but not sufficient, condition for achieving the pre- defined goal of the institute.
- **Motivation** and high level of satisfaction felt by faculty, staff and students of the students creates the right ambience suitable for teaching- learning. Transparency, open mindedness, impartiality with out bias of any kind, healthy competition, opportunities for growth and personality development generates the positive Attitude among the human population of the institute, which is necessary to nurture the talent. In an excellent Institution with motivated people, the processes will be implemented in relevant areas in a systematic way. Systematic implementation is well planned and is introduced in a manner suitable for the approach and the Institution.

- **Academic results** and suitable Placement are the output indicators of the teaching- learning process followed by the Institute. The Institute should asses & review the processes followed based on monitoring and analysis of the results achieved and ongoing learning activities. Finally identify, prioritize, plan and implement the improvements where needed. In a good Institution the processes and its effective implementation will be subject to regular impact assessment and the output will be used to identify, prioritize, plan and implement improvement.

Eligibility Criterion

Any institution offering AICTE approved courses and affiliated to UP Technical University is eligible to apply for the Award.

Awareness Workshops

The awareness/ training workshops at *4-5* zones within UPTU domain will be organized to sensitize institutions and colleges about the model and the role it can play as quality implementation roadmap by combining self-assessment, peer-assessment and benchmarking quality strategies.

Frequency of the Award

The Award will be given once in an academic year (July – June). Award will comprise of a plaque and citation. An award ceremony held with a renowned dignitary as Chief-Guest and Awards given.

Number of Awards

The number of Awards will be a follows-

a. One overall Academic Excellence Trophy - a rotating shield to be passed on to next years winner leaving a replica of the same with the current winner. This will be earmarked for B. Tech. or composite colleges as these cover larger proportion of UPTU students.
b. Three Awards for best B.Tech. Colleges.
c. One Award for best of B.Arch./B.Pharma/B.H.M.C.T. colleges.
d. One Award for best M.B.A. College.
e. One Award for best M.C.A. College.

Benefits to the Applicant Institutions

- It will enable the Institution to asses its own level of commitment to quality.
- It will also indicate the extent to which the commitment is being deployed through every level of Institution and its various areas of activities.
- The Institution will be able to identify its strengths and weaknesses.

Benefits to the Award Winners

Awardees can publicize their recognition through press release, magazines, articles and mentioning it on their letter-heads and stationary.

Awardee's will have the obligation to share their best practices with others by organizing lectures and seminars throughout the state of U.P. and help nurture other weak institutions in their zone to improve their performance in the spirit of 'hand holding', mentoring. This will be done for one year after the Award.

Visible recognition by the University of the quality work carried out by the Awardees Institutions will generate high level of satisfaction among themselves and will motivate them to perform better in years to come. If you consistently chase perfection, some where in the way you will catch **excellence**.

Application/ Assessment Fee

No application/ assessment fee is to be paid by the applicant Institution for participating in the Academic Quality Competition. This is to avoid barriers to entry at least in the initial stage.

Procedure for Implementation

1. Put the UPTU Academic Excellence Award model on website.
2. Arrange training workshops at *4-5* zones within UPTU domain to sensitize institutions and colleges about the model and the role it can playas quality implementation roadmap by combining self-assessment, peer-assessment and benchmarking quality strategies.
3. Publicize the model extensively and prepare a self-contained brochure.
4. Invite proposals from aspiring institutions / colleges both form Govt. / private colleges in all areas of technical education; by a certain cut - off date.
5. Appoint a panel of eminent jury headed by an outstanding academician having experts in quality management from academics, industry and other NGO's. Jury should have at least five members including chairperson.
6. The panel analyses the self - assessment report of each aspiring institution and decides on a cut - off score based on self - assessment report to site visit the organizations short-listed.
7. A five member team of assessors having reputation, experience in quality management from academics, industry and consulting / NGO's to be appointed for site visit.
8. The team of assessors visits each of these institutions short-listed for a 3-day period. Interacts with all stake holders, discusses with top management, faculty and staff, students, alumni, some citizens around the location, peruses through databases, documents, results, and based on total aspects during site-visit, performs the following-
   i. Arrives at a consensus score among the members of the team on each of the 10 factors and total score.
   ii. Identifies Strengths and Areas for Improvement on each of these 10 factors and on overall basis. This will be passed on to each of the site visited institutions to help them to develop and enhance their quality score in future. This will be one of the most important contribution as an objective, professional consultation *I* guidance is available from top experts on quality management as bonus for their participation.
   iii. Team of assessors submits their reports on each of site - visited institutions and presents a comparative table of self - assessment scores and consensus scores after site - visit on each factor as well as total score.
   iv. Team leader(s) presents major findings of the team for each site-visited institution through power point presentation before the jury on each factor identifying strengths and areas for improvements as well as scores. They respond to any queries from the members of the jury and then withdraw from the meeting of jury.
   v. Jury deliberates on presentations made and firms up its opinion on the awards to be recommended to the vice-chancellor.

vi. The Vice -Chancellor finalises the awards after receiving the recommendations of the jury.

vii. Results announced through web, electronic and print media.

viii. An award ceremony held with a renowned dignitary as Chief-Guest and Awards given.

ix. Awardees can publicize their recognition through press release, magazines, articles and mentioning it on their letter-heads and stationary.

x. Awardee's will have the obligation to share their best practices with others by organizing lectures and seminars throughout the state of U.P. and help nurture other weak institutions in their zone to improve their performance in the spirit of 'hand holding', mentoring. This will be done for one year after the Award. For next year, the job will be taken over by the next year's Awardee.

xi. If score is less than 750 points out of 1000 no award be given but a Certificate of Merit can be considered for score more than 700.

xii. The number of Awards will be a follows-

   a. One overall Academic Excellence Trophy - a rotating shield to be passed on to next years winner leaving a replica of the same with the current winner. This will be earmarked for B. Tech. or composite colleges as these cover larger proportion of UPTU students.

   b. Three Awards for best B. Tech. Colleges.

   c. One Award for best of B.Arch./B Pharma/B.H.M.C.T. colleges.

   d. One Award for best M.B.A. College.

   e. One Award for best M.C.A. College.

xiii. Award will comprise of a plaque and citation.

xiv. All those institutions! colleges which score more than 700 points out of 1000 will be offered the membership of 'Star Performer's Circle' with whom the university will be extensively interacting to help improve quality of U.P.T.u. institutions. Certain privileges may be granted to such star performers.

xv. Few prizes may also be considered for recognizing institutions for highest rate of improvement over past year in terms of academic results.

Structure of UPTU Academic Excellence Award Model

Assessment will be made out of 1000 points as per following distribution:

A. **Enablers**: 400 points allocated as follows:

1. Top Management's commitment to Quality & Academic Leadership : 100 points
2. Faculty Resources Development & Management : 50 points
3. Quality Policy & Strategy : 50 points
4. Academic Resources : 100 points
5. Academic Processes : 100 points

B. **Results**: 600 points allocated as follows:

6. Faculty & Staff satisfaction : 100 points
7. Students satisfaction : 100 points
8. Impact on Society : 50 points
9. Academic Results : 250 points
10. Placement Results : 100 points

Major Benefits/Outcomes of Accreditation

1. Relating it to quality of institution as well as programmes. Publishing it to get competitive advantage in attracting higher quality students and faculty.
2. Permitting greater autonomy to such institutions nurturing them for possible up gradation to higher level on sustained accreditation.
3. Using highly accredited institutions as the star performances think-tank.
4. Allowing only accredited institutions to participate for quality awards.
5. Autonomy to fix higher fees, increased intake diversification of programmes within reasonable limits.
6. Increased funding by UGC/AICTE/DST/CSIR project grants.
7. Industrial collaboration and with FICCI, CII, ASSOCHAM, NASSCOM etc. only with accredited institutions.
8. Campus placement priority only to accredited institutions/colleges.
9. Facilitating international networking and MOU's, joint-collaborative programmes, e-learning programmes to accredited institutions.
10. Major conference funding, faculty support, thrust area funding, centres of excellence funding to such institutions.

Concluding Remarks

Accreditation in higher education as a quality enhancement strategy needs to be nurtured as it is in its nascent stage. May be a combination of incentives for going for it and disincentives for not doing so, removing barriers to entry, enhancing credibility of the process and linking outcomes and awards with quality needs to be pursued with greater vigour. Benchmarking with best in the class adopting best practices and using accreditation process to outline roadmap for quality enhancement needs to adopted.

Acknowledgment

Help and support from Mrs. Jaya Prasad for preparing this presentation is appreciated and acknowledged.

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Annexure

1. Top Management's commitment to Quality & Academic Leadership: 100 points

A. 50 points for Chairman of the trust

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Qualifications for the role being performed					
2.	Academic Commitment					
3.	Perceived will to excel and sincerity of purpose					
4.	Perceived concern for faculty development					
5.	Vision and direct involvement in realization of that vision					
6.	Involvement with quality improvement process directly					
7.	Attitude towards faculty & staff					
8.	Attitude towards students					
9.	Academic autonomy to faculty and open-mindedness towards suggestions					
10.	Inspirational quality of leadership/Role model for excellence					

B. 50 points for Director/ Principal

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Qualifications for the role being performed					
2.	Academic Commitment					
3.	Perceived will to excel and sincerity of purpose					
4.	Perceived concern for faculty development					
5.	Vision and direct involvement in realization of that vision					
6.	Involvement with quality improvement process directly					
7.	Attitude towards faculty & staff					
8.	Attitude towards students					
9.	Academic autonomy to faculty and open-mindedness towards suggestions					
10.	Inspirational quality of leadership/Role model for excellence					

2. Human (Faculty) Resource Development & Management: 50 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Recruitment process leading to excellence					
2.	Financial compensation package/process					
3.	Perks and performance incentives					
4.	People development process-encouragement to improve qualifications					
5.	Work culture					
6.	Faculty & Staff performance appraisal process					
7.	Networking with reputed academic institutions-encouragement & support					
8.	Ambience in offices of faculty & staff					
9.	Encouragement for industry interaction					
10.	Skill-up gradation / conference Sponsorship and peer interaction encouragement					

3. Quality Policy & Strategy: 50 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Quality policy on student admissions					
2.	Quality policy on faculty recruitment process					
3.	Quality policy on faculty promotion/recognition process					
4.	Student orientation					
5.	Industry (employer) orientation					
6.	Quality of physical ambience					
7.	Quality improvement policy for faculty & staff					
8.	Vision / Mission leading to quality					
9.	Core values leading to quality of education					
10.	Quality Management Systems-ISO etc in place					

4. Academic Resources: 100 points

(a) Library Resources: 20 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Number and quality of books					
2.	Number and quality of journals					
3.	Library ambience / computerization etc					

(b) Computational Resources: 20 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Number of computers per student					
2.	Networking quality / LAN etc					
3.	Access timings & % availability of computers					
4.	Degree of modernization of computational facilities					

(c) Internet Connectivity: 10 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Bandwidth, keeping size in mind / campus networking					
2.	Availability of online-journals / learning resources					

(d) Laboratories Infrastructure: 25 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Adequacy in terms of number of labs required for the programmes.					
2.	Adequacy in terms of equipment / facilities required					
3.	Availability of technical support (manpower) relevant to the lab					
4.	General ambience & upkeep of equipment and space					
5.	Availability of laboratory Manuals and other instructional resources					

(e) Lecture-Hall Infrastructure: 25 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Adequacy of lecture halls with respect to students strength					
2.	Quality and ambience in lecture halls-lighting, furniture etc					
3.	Educational technology / multi media and other facilities					
4.	Tutorial rooms / project rooms availability					
5.	Auditorium for special lectures, industry lectures, Training & Placement activity etc					

5. Academic Processes: 100 points

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Effectiveness of teaching-learning process-in terms of class size					
2.	Tutorial process-size of tutorial groups & effectiveness					
3.	Laboratory process-size, mechanism of report writing & interaction with instructor					
4.	Process of lecture delivery / focus on learning and interaction					
5.	Industry-interaction process					
6.	Process of projects allocation and guidance					
7.	Evaluation process for sessionals / labs					
8.	Practical orientation					
9.	Process for allocating summer training					
10.	Process to enhance communication skills					
11.	Process to improve social skills					
12.	Personality development process					
13.	Process for value orientation					
14.	Sports orientation and facilities					
15.	Support towards Technical-symposia/festivals					
16.	Networking with academia in India/abroad					
17.	Discipline					
18.	Academic schedule regularity					
19.	Grievance handling process with respect to students admissions					
20.	Grievance handling process with respect to students results					

6. Faculty and Staff Satisfaction: 100 points (Conduct Surveys)

Rate Satisfaction on following factors on a 5 points scale

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
A.	**Hygiene factors: satisfaction level:**					
1.	Pay					
2.	Perks					
3.	Promotional avenues					
4.	Physical working conditions					
5.	Workload-Academic					
6.	Workload-Non Academic					
7.	Housing on campus/or allowances					
8.	Transport allowance / facilities					
9.	Locational convenience					
10.	Safety/security on campus					
B.	**Motivational factors:**					
	satisfaction level:					
11.	Career advancements / opportunities					
12.	Self Esteem / perceived respect in the organization					
13.	Fairness in recognitions					
14.	Class room academic challenges					
15.	Professional & peer interaction					
16.	Research facilities available					
17.	Consulting opportunities					
18.	Nurturing of talent for academic growth by the institution					
19.	Conference support given					
20.	Autonomy for professional growth					

7. Student Satisfaction: 100 points

(To be based on surveys and feedbacks)

Sl. No.	Sub factors	High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
A.	Hygiene factors: satisfaction level:					
I.	Lecture facilities					
2.	Library facilities					
3.	Project facilities/quality of guidance					
4.	Tutorial help					
5.	Computational facilities					
6.	Sports facilities					
7.	Medical help/support					
8.	Sanitation / Housekeeping					
9.	Maintenance of buildings					
10.	Cafeteria / Canteen					
B.	**Motivational factors: satisfaction level:**					
II.	Teaching effectiveness					
12.	Fairness in evaluation					
13.	Intellectual learning environment					
14.	Summer projects quality					
15.	Industrial interaction					
16.	Placement levels					
17.	Creative pursuits					
18.	Co-curricular activities					
19.	Support by Administration					
20.	Inspirational academic leadership, teachers and staff					

8. Impact on Society: 50 points

(Based on feedback, databases on following 10 factors)

Sl. No.	Sub factors	Impact level				
		High 05	Very Good 04	Good 03	Satisfactory 02	Low 01
1.	Concern for economically poor					
2.	Concern for socially backward					
3.	Gender equality and fairness					
4.	Encouraging talent in schools in the zone					
5.	Help in improving schools quality					
6.	Fellowships instituted					
7.	Fee waivers given					
8.	Environmental concerns in neighborhood					
9.	Support to NSS / NCC					
10.	Rural development initiatives					

9. Academic Results: 250 points: - Directly on % of Average Gross Intellectual Attainment per student.

Exceptional	: 90-100%		Satisfactory	: 40-50%
Outstanding	: 80-90%		Marginal	: 30-40%
Excellent	: 70-80%		Low	: 20-30%
Very Good	: 60-70%		Very Low	: 10-20%
Good	: 50-60%		Unacceptable	: 0-10%

10. Placement Results: 100 points: - Directly on % of Campus Placement moderated by a factor given by “Average salary level/Industry average salary”.

Exceptional	: 90-100%		Satisfactory	: 40-50%
Outstanding	: 80-90%		Marginal	: 30-40%
Excellent	: 70-80%		Low	: 20-30%
Very Good	: 60-70%		Very Low	: 10-20%
Good	: 50-60%		Unacceptable	: 0-10%