1.3 Leveraging Quality Assurance and Accreditation in Higher Education for Developmental Education (2004)

1. Higher Education - Major Concerns & Problems

A large group of students in Pune University demanded that we do not want degrees we want jobs. The then Vice-Chancellor, a renowned academician, replied that University is not an employment exchange; we give you only education and knowledge. This happened four decades back and can happen now any time anywhere in India. When I was Vice-Chancel lor of Pune University two decades back, the then Chief Minister of Maharashtra, while addressing university academia, criticized that university created graduates with bloated expectations and are useless in life and work situations; and further suggested that general education colleges should be closed down. As teachers and academicians, we will not like to accept this criticism for many reasons. But the fact remains that a large majority of students in Indian Higher Education going for general degree courses do not find employment in life on the basis of the skills and **competencies** or **the** knowledge they acquired during their studies. The system of Higher Education produces unemployed or unemployable graduates. It is often observed that unemployed are being graduated; since most of the students will accept a job if available, rather than go for full-time education for a general degree.

India has one of the biggest systems of higher education with more than 350 universities of all types, 15000 colleges, 9 million students and 500000 teachers. Nearly 85 % students go for general degrees, 10 persons for post-graduation and research and the rest for professional degrees. The population coverage is hardly 6-7% of the corresponding age group and is far less as compared to coverage in developed countries. Nearly 20% of the students are getting education through open and distance education. Raising the coverage up to 12-15% in the formal system Would need far higher resources (doubling the total **investment** of about **Rs.** 100 **thousand** corer for **doubling** the **coverage)** that cannot be afforded by the nation.

Besides the numbers (quantity) Higher Education in India faces the problems of poverty illiteracy, ignorance, and under-development not solved so far. Besides these, the disparities such as rich-poor, urban- rural, developed-undeveloped, literate-illiterate and now the digital divide are creating social conflicts and tensions throughout the country. The recent parliamentary elections of2004 have shown a sharp reaction of common people for their exclusion, the exclusion crisis they faced, due to the processes of competitive globalization, liberalization, privatization, and IT based development and its application. The system of Indian Higher Education has, therefore, the challenge of addressing the problem of quantity, quality and equity with justice to all.

2. Globalization Challenges & Responses:

Persons, groups, communities, institutions and organizations are getting connected through Internet and communicating with anyone, anytime, anywhere are becoming a reality. The Information Technology (IT) has created a process of globalization and liberalization. The IT is now entering in all walks of life- economic, socio-cultural and political- and is creating new ways of communicating and working. The process of globalization is obviously used first in economic activities for globalization of trade and expansion of markets. Every area of

human endeavor at any place and locality can get globalized through network communication.

Application of Information Communication Technology (ICT) in the field of education is creating a new scenario for marketing education. By creating educational content in multimedia and multi-lingual formats and by offering learning services, education can be globalize and marketed throughout the world. This comodification of education, though not liked by all and debated all over the world, has become a reality. India is throwing higher education open for global competition and, after April 2005, Indian colleges and universities would face competition from Higher Education Institutions from abroad. Education is a big business and is estimated to be worth US $3500 Billion yearly, far more than IT business. The global competition is driven by high quality, low cost and high brand value of the educational products and services. Internationalization processes and job opportunities available now globally for Indian graduates is driving the Indian educational system to face these challenges and offer its response.

On the whole, the Indian System of Education is very sluggish in responding to the challenges of education. Developed countries through their universities and alliances have started marketing their education in India. They are creating their presence in India through partnerships with local and private institutions; and the process would be accelerated once GAAT becomes operative. Indian response to the globalization so far is mostly through encouraging privatization of education, allowing industries and private agencies to enter into this field through private and deemed to be universities; and by encouraging some for marketing Indian education abroad where Indian presence exists.

The privatization of education has created a new situation and conflict in Indian society, which is highly stratified on socio-economic basis. The unit costs of education of professional education which are about Rs 2.5-3 Lac for medical Rs. 30 - 60 thousand for engineering courses, and the inability of the Government to evolve suitable policy to support meritorious students from weaker sections of society has created tremendous discontent among middle and lower classes. The inability of the Govt. to support higher, professional, general education, particularly when it is expanding to cover larger numbers in tertiary education, is making education accessible to rich classes only. This is cultivating money driven values, rather than humanity driven values. This ultimately violates basic right of equity guaranteed by the Indian constitution; and would create social strife and conflicts.

The major problems and concerns of Higher Education **Sys**tem **are:**

1) Increase the coverage from its 6-7% substantially with least support from the State and making it affordable to people from lower & weaker sections.
2) Raise the Quality of Higher Education and make it accessible to all Higher Education Institutions in India
3) Increase Quality and decrease the unit cost of education so as to be competitive in global markets.
4) Link education with development by making it relevant to locality so as to develop communities at local as well as at global levels.

5)   Create a new paradigm of participatory and co-operative education focused on development (Developmental Education) so as to offer alternatives to the current marketing processes.

These issues cannot be addressed with 'more of the same[1] approaches followed during the last half century; and needs a great transition and transformation to the Information Age, wherein ICT could be used effectively by all for sustainable development of their localities in the context of globalization.

3. Higher Education for All :

Besides increasing coverage of HE for the 17-25 yr. age group, distance and open education system has extended education to mature adults of higher age groups. One national and ten state Open Universities and about 70 Distance Education Institutions of traditional universities are offering higher education to nearly 20 % i.e. 2 million students. While establishing YCMOU in Maharashtra, we faced a question, what is higher education in relation to mature adults. Its description as tertiary education links it with primary and secondary education, which is appropriate for children and youth. A mature adult in any society acquires life and work skills through informal and family traditions; and therefore has some content- knowledge and skills. We therefore described higher education as the skills, competencies and functionality development related life and work related activities with appropriate knowledge base. The defining criterion is the capacity to enable adult to participate in the developmental process in a sustainable way. This gave us a different way of looking at higher education, which could be extended to all, even illiterates, by using appropriate teaching and learning methodologies. The success of IGNOU in certifying learners in tannary related skills and competencies, some of which were illiterates or less educated, shows the way out. Less educated farmers in Maharashtra showing innovativeness and achievement by understanding agriculture processes scientifically, increases our confidence in high learnability of common persons, when it is linked with relevant development of his or her need and demand.

It is our considered opinion that by **creating training and learning** processes related to developmental activities of common people, it is possible to develop higher education system for all. This is also a need of the information or knowledge society.

4. IT Development and e-Education:

The process of globalization generated by ICT is creating networks that link every user through Internet connectivity to anyone anytime anywhere. The user should have network access devices such as PC or handheld device with appropriate facilities. The rate at which ICT is spreading in India, it is estimated that 80% population will be networked through wireless and online appliances by 2012.

The **trends setting technologies** in future networking are:
1)   Mobile and Wireless broadband Internet
2)   Networks and networking technologies
3)   Direct to Home (DTH) & WLL to address the last mile problem of connectivity
4)   Grid Networking Architecture that enables to develop Knowledge Grid.

5) Software for various processes, interactivities and **systems.**
6) Technologies for personalization, group customization and localization

Almost all communication in networked society will be through networks; and could be recorded at various places and servers. The information stored in the network would reveal activities and actions, likes and dislikes of people who communicate. By using search engines and analyzing tools, it is likely to obtain from information stored in networks, the useful knowledge about people and their behavior. The knowledge so obtained could be gainfully used for value addition or wealth creation. The knowledge generated in the networked society would, therefore, be creating knowledge economy and knowledge based jobs. The Indian Education System has the responsibility to prepare youth and people for the knowledge based society.

Development of network is a gigantic task **and** is **carried** out by every sector of social and industrial activity. It needs using expertise and technology developed by specialists and special institutions. In this period of globalization, one cannot think of creating in-house expertise in all the areas essential for education or development. Hence partnerships and outsourcing becomes the way for creating excellence in products and services that are produced in any sector of activity.

Information Technology offers for educational field:
I. **Network** for connecting students, teachers & institutions
II. **Knowledge grid** to store knowledge and content with push-pull facility for any user.
III. **Broadband connectivity** through **on**-line and wireless communication for creating distributed classroom and intimate interactivities.
IV. **Software** for all types of interactivities between learners and learning/teaching resources
V. **Personal appliances** like PC, mobile cell-phone and handheld computers for personal Assistance in personalized activities and work.

All of these would be obtained from companies and agencies specializing in various areas. Many of the educational administrative and managerial tasks such as communication with students through call centers, student registration, conduct of examinations and certification, etc. could be outsourced to small and big specialized agencies.

A group of teachers and institutions can offer education of highest quality by pooling their academic resources, best expertise and experiences and offering educational products and services to learners not only in a free-to-face (formal) mode but simultaneously in e-Education or distributed education mode. These types of virtual institutions (virtual colleges, virtual universities) have already been established to raise competitiveness and quality in offering educational services to learners not only locally but globally.

Besides networks, software and access technologies for connecting, communicating individually or in groups (distributed classroom), e-Education system requires:

1) **Content in e-formats** of static or stable nature and dynamic content created through interactivities.
2) **Educational Delivery System** that offers content and services to students anywhere, anytime.
3) **Management of organization** of resources and services required by learners along with Quality Assurance and Certification of the institution.

The UGC has undertaken programmes of network building by
- Developing its information net by creating 17 mirror sites in India, where all content is reflected,
- Connecting universities and colleges through Internet and
- Creating e-content suitable for various courses and programmes.

UGC is also linking libraries (INFLIBNET), EMRC & AVRC's through CEC to offer facilities for e-content generation and delivery through network. The ISRO is launching an educational satellite with 7 transponders & 72 channels (EDUSAT) in September 2004 and has a plan of creating country-wide distributed classroom by installing about J 0,000 V-SATs throughout the country so as to link all educational institutions in India within the next 3-5 years. A Maharashtra Knowledge Corporation (MKCL), a public limited company for profit established by the Government of Maharashtra with shareholding by universities, colleges and individuals interested in education, has drawn a plan for Networking of all universities & colleges going down to schools and community learning centers at a village level and is trying to provide total educational solution to institution to offer their products and services (ref. **www.mkcl.org** & **www.parivartan.net** (Marathi)). Many institutions and organizations - private and public - throughout the country are using ICT for educational technology development for offering education of high quality to larger numbers. International norms are **also getting evolved** for electronic storage and communication **of content and for** mobile communication so **that** individuals and groups can communicate easily with each other anywhere anytime.

Mantra & Tantra of ICT:

The IT is used in two ways. The first and well established a practice is to use IT in an enabled way in educational process. The IT enabled education helps to achieve better efficiency, reduces costs and extends outreach and coverage to large number of students outside the campuses of the institution. It basically does not change the processes and hence mode of education. Another way is to use IT in a driven way. The IT driven education changes the methods of content generation, content storage, content packaging and content deli very and hence offers new paradigms in different processes and modes of education.

IT driven processes lead to **mass-personalization,** a process unknown so far. The IT is therefore creating new paradigms and new processes such as just-in-time education, mass-personalization, group customization and localization.

ICT has been applied in an IT driven way in some simple processes, such as:

- Personalized examination and testing at different difficulty levels and domain achievements (ETHRL)

- Total e-Governance of educational processes (MKCL)

- Mass-personalized admission to Pune University for admission at PG level and external
    student registration.

- Farm specific consultation/advise to farmers (MKCL).

The mass-personalized systems are the data and rule based decision and support systems. They are very user-friendly, and give access to anyone anywhere.

The mantra of the Information Age technologies is **mass- personalization, group-customization and localization** in the global network environment. It brings relevance to the technology and content for local and personal development.

It should be noted that the Agrarian Age had personalized and localized education and production systems were based on the support of natural resources. The Industrial Age had and is having mass production and mass-education systems with globalization in the context of secondary/industry products and services. The Information Age is combining both these features of Industrial and Agrarian Ages; the mass - personalization with globalization + localization (Globalization) in the context of knowledge and information resources made available over global networks. Hence the **mantra** of the Information Age.

The **tantra** (technology) for using the mantra is the effective use of ICT and network facilitation for social mobilisation - building techno-social networks. Hence the **tantra** of Information age is to build techno-social networks by mobilizing people and institutions by establishing partnerships, particularly public-private partnership for creating products and services of best quality with personalization / customization / localization.

Use of ICT for networking, for software essential for network & personalization, fore-education or distribution education, fore- content and services offered to all with a strategy that *content is free and services are charged*, for knowledge grid and for creating virtual institutions and organizations for education and development would, we believe, offer way out for quality education to all at affordable cost.

5. 5. Quality in Higher Education:

In response to National Policy on Education (1986) and the Plan of Action (PoA 1992), the National Assessment and Accreditation Council (NAAC) was established in 1994 in Bangalore. The NAAC is having the responsibility of AA Institutions of Higher Education in India. The vision and mission of NAAC are:

Vision - To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives.

The mission of NAAC is:

- To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;
- To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;
- To encourage self-evaluation, accountability, autonomy and innovation in higher education;
- To undertake quality-related research studies, consultancy and training programmes, and

To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.

The strategy of the NAAC is to make QA an integral part of the Institutional development. NAAS has so far AA.... Universities and …. colleges.

The process of NAAC assessment goes through three stages:

1) The preparation and submission of a self-study report by the unit of assessment.
2) The on-site visit of the peer team for validation of the self-study report and for recommending the assessment outcome to the NAAC.
3) The final decision by the Executive Committee of the NAAC.

NAAC following 7-criteria for institutional assessment:

1) Curricular Aspects
2) Teaching-Learning and Evaluation
3) Research, Consultancy and Extension
4) Infrastructure and Learning Resources
5) Student Support and Progression
6) Organization and Management
7) Healthy Practices

The 7-criteria are further described by 42 core indicators. The 7-criteria are the convenient expression of the basic processes of any educational institutions, namely:

- Educating - Teaching, Learning & Evaluating
- Creating and preserving knowledge
- Developing institutional infrastructure
- Managing education, and
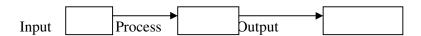- Creating educational environment

The NAAC has many outstanding achievements to its credit, andhas achieved the rate of AA of nearly 1,000 institutions per year.

NAAC has the responsibility of AA nearly 15,000 colleges & universities in India. NAAC has focused only on 5,000 colleges & universities recognized by UGC under 12B and 2F.

Every expansion in education has its accompanying problems. Involvement of more co-ordinators and Peer Teams create problems of consistency, reliability and accuracy, along with inter-team variations. We are struggling to standardize the process of AA so as to reduce substantially subjectivity and inter-team variation. There are some major issues related to the model of AA adopted; which is quite close to the on -the-spot evaluation or end examination. By considering the errors in the university examinations, the NAAC assessment is quite accurate with possibly error of +/-3 to 5. This is a great achievement.

Changing to Process Evaluation

QAA of NAAC is essentially based on industrial model of

Input ☐ Process ☐ Output → ☐

And the Self-Study-Report and AA process essentially emphasizes input and output. The reason is obvious, since there are no reliable methods of recording and assessing interactivities involved in teaching-learning process, the basis of educational process. Quality in education depends on the higher level and quality of learning interactivities (higher discursive nature) and on actions of **a learner** and learning groups. It is therefore essential to change to process evaluation- based on academic interactions.

Changing over to Learning & Developing Society:

In the Information Age, knowledge based economy and society is getting developed. Since education is the process for acquiring knowledge, it is assuming central role in all processes of development. The linkage for education and development should be intimate, tangible and measurable in terms of physical, financial, intellectual, socio-cultural and ethical wealth it generates in the individual, groups, communities and society. The QAA system should therefore promote development education; and the types and models of development should fulfill the needs requirements and aspirations of locality and community served by the institution.

6. *6.* **Leveraging Quality for Development:**

NAAC has carried out Assessment and Accreditation of more than 1500 institutions. Since validity period of accreditation is of 5 years, nearly 50 institutions have applied for Second or re-Assessment and Accreditation for the further five year period.

NAAC has already decided to keep the same frame of work of 7 criteria and core indicators as well as weightages to the criteria for universities, affiliated and autonomous colleges. For re-assessment, it has been decided, after wide consultation, to add five core values that would enable colleges and universities to more towards developmental education, total

quality management and e-education. The five Core **values** are linked with the processes and activities related to

1. Promoting use of technology, particularly ICT.
2. Relating education to national development.
3. Nurturing global competencies among students.
4. Inculcating value system.
5. Institutionalizing quest for excellence.

NAAC is now working on evolving system and methodologies for including the core values in the self-study processes of the institution. We propose to

1) Move towards educational process assessment.

2) By establishing IQAC, enable institutions, to setup, organize and continuously develop processes of internalization of quality by **building capabilities and using them fully** for educating student and for developing system of education.

3) Use ICT in various functions and processes of education imparted by the institution initially by establishing website of the institution & slowly linking all the stakeholders to establish institutional network.

NAAC purposes to offer software support to the institutions that would help them to do self-assessment and even arrive at the grade the institution can get rightfully.

1. Promoting use of ICT:
Since ICT is a driving for creating Information Society and knowledge economy, IT has to be used by establishing

1. **IT infrastructure** such as website, LAN, V-SAT, server with data base distributed
classrooms, **institutional network, access devices for administrative** & academic staff and students, internet connectivity (on-line &WLL).
2. **Software use for academic and administrative functions,** (such as LMS, CMS, e
governance etc) so as to move slowly towards.
3. **IT literacy & functionality training** to all staff and students for using ICT systems.

The goal should be to move towards e-education that combines face- to-face education, distance education and web-based education. While using ICT, the institution can incorporate IT promoted value systems such as

- Democratic participation.
- Transparency and accountability
- Decentralization
- Cooperation and partnerships

- Sharing and caring.

The ICT will also enable the institution to link itself with local & state/ national level institutions and organization for establishing partnerships and collaboration.

2. Relating Education to Development:
The teaching, research and extension activities of the institution should slowly be linked to developmental processes and activities going on in the community & locality as well as nationally and internationally. Following steps could be taken:

- Linking curricle and content with the areas of development at national and local levels.
- Offering courses related to extension work linked with developmental programs and processes at the international/ national/local levels.

Examples:
1. Medical faculty/colleges linking to community health.
2. Engineering linking with rural and industrial development of the region & quality and utility of the work done or services offered.
3. General degree programs linked through extension work with community and social development.
4. Student sent to foreign institutions to study some courses in their local/national context
   for a term or two.
5. Serving the cause of social justice-i.e. ensuring equity & increasing access to education
   by helping schools/students, etc.

The goal of linking education to development is to contribute to the development of locality, community and individuals in a tangible way, study the developmental models involved and benefits community and locality received in a sustainable way and ultimately link working and learning. The processes and models of development, apart from their outputs and outcomes, are based on some specific values and group activities. The institutions will have to identify its own value system for promoting specific developmental models it adopts for development of students, teachers and the communities it serves.

3. Nurturing Global Competencies among Students:
In the context of globalization, liberalization and GATT agreement, the students would have to search job opportunity not only locally but also globally. It is therefore essential to cultivate amongst students skills, competencies and values that are acceptable in quality and standards at national and international levels. The institution has to identify global competencies, inter-cultural values and develop these in students through courses and activities. Partnering with foreign and Indian education institutions may help in the training and developing students. For becoming competitive internationally, it will be essential to educate students to be innovative, creative and entrepreneurial. Partnership and collaboration with industries may help in linkage with the world of work, which is fast changing under the impact of globalization and modem technologies.

4. Inculcating Value System:

HEI have the responsibility of inculcating desirable value system among students. The value system must emanate from the Indian culture and values enshrined in the Indian Constitution.

The institution should be able to have distinct profile of a degree student, describing not only the knowledge base, but skills, competencies and value system cultivated in the student.

5. Institutionalizing Quest for Excellence:

As proposed by NAAC, each institution should establish IQAC with functions to

1) Identify strengths & weaknesses in the process and outcome of teaching, learning and evaluating.
2) Raise capability to higher levels.
3) Identify processes for developing capabilities and quality in all the 7-criteria of NAAC.
4) Create mechanism for developing competencies and skills for higher quality and excellence.
5) Develop feedback mechanism and use it for reforms and development.
6) Obtain process information so as to use it for better & effective processes of education &
    Management

The goal is to continuously develop capability and achieve excellence with Total Quality Management (TQM). Through the five core values, the institution hopefully would be able to follow a path of development aimed at:

- Institutional Development
- Educational System Development
- Student and Community/Locality Development.

While considering development, it is essential to work for sustainability by considering all the essential aspects.

The sustainability would require
1. Creating and generating financial resources to support developmental activities.
2. Generating socio-cultural wealth that sustains support and participation of community in development.
3. Create intellectual and ethical wealth for developing the institution and community around.

Right paradigm of developmental education may lead to the sustainable model of development adopted by the institution.

7. Capacity Building & Maturation Model for Institutions:

Currently the NAAC is facing following issues and concerns:

1. On-the-spot evaluation is like end-examination and has all the attendant problems such as satisfaction of the institution, subjectivity of the Peer Team etc.
2. Quality of educational assessment and accreditation is depending on the quality of interactivities between learner and learning/ teaching resources. Hence process assessment rather than input- output assessment should have dominance.
3. Development of informational model of Quality Assessment and Accreditation in which institutional customization and localization are achieved by retaining global measurement parameters.
4. Change over from one-time assessment in five years to continuous or frequent Assessment and Self-accreditation process.

The transition from the existing process could be achieved by developing **e-Assessment and Accreditation** process in which the institution gathers all the information at the source when it is generated while carrying out various activities of the institution, analyzes the information automatically with the help of software; and links the outcome with 7-criteria and 42 core indicators treated as processes.

It will be essential to evolve benchmarks for each core indicator from best practices followed or obtained from accepted (normative or ispsative) by best institutions or by the best perception of best quality levels recognized globally. This is rather an important and involved exercise and has to be carried out over the time through continuous reform processes.

It would be essential to develop built-in guidance system that would give not only levels of achievement, but also what remains to be done to achieve higher level in Quality of Education.

By following the practices in other areas of institutional and industrial life, Assessment and Accreditation could be limited to five levels with well-defined levels of capacity development and their full utilization or maturation in imparting highest quality education by achieving Total Quality Management. We call this process as Capability Building and Maturation Model (CBMM) for education institutions.

Five CBMM levels:
We may define the five levels and link them with grades in 9-point grading system being used currently as:

Level I - Initial level:
The institution establishes IQAC and inspection process for quality control on adhoc basis, which usually results in unpredictable results. (Could be linked to C-grade)

Level II: Quality Control for Repeatable Outcome
The IQAC establishes management system that ensures repeatable performance (link with C+, C++)

Level III: Quality Control developed with defined processes

The Cell identifies the process, establishes management system for each one and integrates systems for ensuring total institutional performance (link with B, B+)

Level IV: Quality Assurance Managed

The cell manages the processes and output and outcomes by establishing information gathering system managed quantitatively (link with B++, A)

Level V: Quality Assurance Institutionalized - Total Quality Management

Process improvement is institutionalized and Total Quality Management achieved.

Besides process management and improvement till highest maturation level, the CB MM has two other dimensions of institutional development.

- Capability building, and
- Education system development

<u>The Capability Building</u> is quite a complex process and will go through cyclic reforms. The Capability is based on processes for creating higher level of facilitation and infrastructure, and for capturing and disseminating information/knowledge. Building capability would need new ideas, concepts, solutions and innovations, which could help in capacity building that would help leveraging and institutionalizing Best Practices. Ultimate objective is to achieve enhanced performance to reach the goals of education set forth by the institution. Capability building would need raising motivation of the institution to seek, collaborate and develop a culture of openness and change management that would go a long way in achieving sustainability in developing processes generated.

<u>The Educational System Development</u> would require setting higher and higher goals for the educational programmes, consistent with the Information / Knowledge Society being formed in the country or internationally. In this the five core values proposed, and partnerships and consortia with other institutions and organizations may help to achieve higher level of education in terms of quality, affordability, relevance at global and local levels and linkages of education with working and developing. The path of developing capability and education and the model of development appropriate for the students & stakeholders is the most important task of the institution.

Methodology of QAA under CBMM:

We propose that the system should be based on self-assessment and self-accreditation; and the role of NAAC is to help achieve higher levels by giving support and guidance through a Peer Team appointed for the institution for a specific period, say of 5 years. The NAAC should also develop knowledge base to support the assessment and accreditation activities over a network accessible to all concerned. The process should use ICT for information

gathering, analyzing, and accreditation; and for communication to Peer Team and NAAC. Since education has many stakeholders, the relevant information should be accessible to students, teachers and the society. When the Head of the institution and Peer Team agree, on-the-spot visit could be organized for validating and assessing; and the result should be either agreeing to the self-assessed grade of the institution or not agreeing with the grade by giving reasons for disagreement.

The new process could be implemented on continuous or yearly basis, and would eliminate many concerns and problems faced in the existing model of Quality Assessment and Accreditation.

The programme and ideas proposed above by the speaker are at the R&D stage and have yet to be considered by and approved by the NAAC.

8. Towards Life-Long Developmental Education:

Development of institution as well as institutional educational system is considered through CBMM. The networking of educational institutions, using EduSat in creating distributed classroom, developing e-content and knowledge grid, creating software for mobilizing and for partnership building and for personalizing / group-customizing and localizing; gives challenging opportunities to develop **Indian System of Quality Education for All.** National /International and State level groups of colleges and universities with specific domain and developmental interests can form consortia to offer the best of learning and developing to individuals, groups and communities. The strategies proposed could be used effectively for building Life-Long-learning (L3), L-groups and L-communities. In fact, UNESCO has identified building L-Communities as the main goal for university education. The cost of education could be reduced substantially by making content free and changing services. Our guesstimate is that professional fees could be reduced to $1/3^{rd}$ and other general course fees could be brought down to about 10 % of the existing unit cost fees. In case of meritorious students from weaker sections, earning and learning could **be** practiced and institutionalized. Thus the path towards knowledge in Knowledge Age could be offered with equity to all, and the triangle of quality, quantity, and equity could be resolved by employing ICT exclusively in the Information Age.

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