CHAPTER - II

REVIEW OF RELATED LITERATURE
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2.01. INTRODUCTION

Entry into the survey of literature of the relevant field enables the researcher to keep pace with the changes in the respective research area. The review is not only a mere collection of thoughts in publication and journals, but it is a launching pad to understand the research gap to bridge the research area in the right perspective.

In a nutshell, the review of literature leads to

- Conceptual clarification
- Up-to-date knowledge in the respective research field
- Identification of research gap in the field
- Familiarization of appropriate methodology relevant for the study
- A sound knowledge of the process, tools and measurement techniques adopted by the research scholars
- Develop a research proposal

With this background in mind, the researcher presents a detailed review of works reported in various sources on the Quality movement reflecting the perception of quality in the field of Higher Education, the practices followed in the process of Assessment and Accreditation of Educational Institutions in India and abroad. This review leads to a summary of findings for revisiting the existing assessment model on the perception of academia and educational experts and also able to identify the practically workable operational indicators in the process of quality assessment of Higher Education Institutions through the proposed new assessment model.

The literature reviewed on the present study has been classified into categories such as Analysis of Quality and its movement in Higher
Education, Quality Assessment and Accreditation of Higher Education Institutions and the Functional Factors on the Assessment and Accreditation.

2.02. STUDIES ON QUALITY AND ITS MOVEMENT IN HIGHER EDUCATION

One of the most difficult concepts to define is Quality itself, because, it is an abstract term. Despite widespread use of the term, more or less agreed upon definition has not yet materialized. The notion of quality, then, is very close to distinctiveness i.e. exclusivity and excellence. Quality is designed with different approaches, viz. fitness for purpose, value for money and consumer satisfaction.

As regard to academic quality, till 1990, the quality movement from the 'excellence' to 'fitness for purpose' was witnessed. But late 1990s witnessed a correction in this movement, first to the basic standard approach followed by more consumer satisfaction-oriented approach. In the days to come, the very subtle difference in quality movement between relative and absolute perspectives, between internally oriented and outward looking approach will be witnessed. Whatever be the approach to quality, it needs continuous attention for its existence, continuance and excellence.

Mclagan Particia, (1991) explored, in his study, that real commitment to innovation and continuous improvement on quality is demanded to get away from deterioration. The quality movement has the potential to enable process improvements, break through thinking and mutual accountability of individuals and teams. Even if many formidable theories on quality management are given by reputed theorists, viz.
Deming, Crosby, Feigenbaum, Taguchi, Ishikawa and Juran, each
theory is unique in the kind of processes and procedures advocated, but
the common thread is the concept of continuous improvement.

The concept of quality is also applicable to education, which is
essential to educate learners, the teachers and education service
providers in developing competencies to seek relevant information
knowledge. The education at Higher-level institutions has quality if the
students experience the same as a meaningful, developing and interesting
exercise and if the students have acquired knowledge and characteristics,
which enable them to be professional academics in their area.

Green and Harvey, (1993) have identified five different approaches
of viewing quality in the field of higher education. According to them
quality may be viewed:

- in terms of the exceptional ( highest standard )
- in terms of consistency ( without defects and getting in first
time )
- as fitness for purpose
- as value for money and
- as a transformative process ( transformation of the
  participants )

Bureau of Indian Standards, (1988) defines the quality as the
totality of features and characteristics of a product or service that bear on
its ability to satisfy stated or implied needs.

Naudean, (1992) says: "call for quality and excellence have origins
within the institution whether coming from students, faculty, administrators
or service personnel. They also come from alumni, interest group, the community of media and governmental bodies, in many ways, shapes and forms”. It is significant that the demand for quality in education is coming from all concerned.

Mathews, (1993) analyzed the basic view of why total quality is needed in the higher education field. His seven-step model is useful but falls short in not identifying the ‘customer’ as one of the seven steps. Academic and total quality management converges in four basic areas: curriculum, Operations, Overall direction of the institution and Teaching and research. In order to assume a real commitment to total quality management, academic institutions must follow seven steps:

1) Identify the institution’s primary stakeholders
2) Develop a specific competitive quality based mission
3) Establish internal measures for quality and excellence in specific and identified areas
4) Determine who has to commit to the chosen standards
5) Establish motivation for those unwilling to commit to quality and excellence
6) Form quality progress team and
7) Report, recognize and reward success

The total quality management theorists, viz. Deming, Crosby, Juran, Ishkawn and Iwai illustrate how TQM is applicable to education.

Hough.M.J, (1992) did a study on “A Paradigm shift for Educational Administrators: the Total Quality Movement” In this study the researcher reviewed the similar Total quality Management Theories, of Deming, Crosby, Juran and Ishkawa to illustrative how total quality is applicable to education. They insisted the paradigm shift in educational administration.
The first part of the report reviewed current Australian Societal ideas and pressures and develop the concept of a 'social discontinuity' effect and the second part summarized the idea of total quality movement. Third part of the report analyzed selected paradigm in educational administration commenting on their relevance to the current Australian educational paradigm - the design concept.

Schmidt, Warren. H.Finnigan, Jerane, P. (1992) in their study on “The Race without A finish Line: America's Quest for Total Quality base Management Series” reviewed the attempts to put quality revolution into perspective and suggests diagnostic questions to determine whether TQM is appropriate for a specific organization. Further it has mentioned the strategic implementation based on Key success factors identified as common to all Balridge winners:

i) Establishing supportive organizational roles and structures
ii) Using the right tools and processes
iii) Implementing long term educational programmes
iv) Creating meaningful recognition and reward system
v) Encouraging complete and regular communications

Further it examined why and how large and small organization competed for these awards, how the competition affected them, what they learned in the process and how they are maintaining an improvement process since winning their award.

Lenenberger John A; Whitaker Sheldon V, (1993) traced “Total Quality Movement in Education”. This evaluative report reviewed TQM as a result of the desire of W. Edwards Deming, an American Statistician to permit the economic system to maintain its edge in a growing global market. The success of Total Quality Movement in education begins with
its relationship to key players affecting the educational systems. Further the evaluative report stated that the quality movement concentrates its efforts and energies on school governance, curriculum design, instructional practices and the student outcome. The center for Total Quality Schools at Pennsylvania State University, the first university based project designed to provide teachers and administrators with the training, support and Research based needed to implement total Quality movement.

Miller, Richard. I, (1996) researched on “The Quality Movement in Higher Education in the United States”. This study viewed various quality control strategies in American higher education, looked and compared TQM, outcomes assessment, Demings 14 points, the Malcolm Balridge National Quality Award, ISO 9000 series, restructuring, re engineering and performance indicators. Further, the author suggested that colleges and Universities would probably use more traditional model than TQM in future.

Kezar, Adrinna, (2000) traced the trends on “International Higher Education” The author in their research study described the new knowledge based economy resulted in a move toward utilization views of higher education in which economic values are emphasized and fiscal resources are the true measurement of value.

Further, several other trends are reviewed in the study as follows:

a) bureaucratization
b) accountability
c) quality
d) access
e) redefining higher education
f) globalization
g) lifelong learning and continuing education
The review explored that accountability and quality movement have been going on for years in some countries.

Kouptsov. O, Tatur, Y, (2001) studied on “Quality Assurance in Higher Education in the Russian Federation Papers on Higher Education”. This evaluative report explored the major aspects of the Russian educational systems, which were examined in terms of quality assurance. The quality assurance system in Russian Federation has the following components:

- Admission systems to Higher education
- The course program
- The teaching staff
- Research
- Social, economic and material conditions for teaching and learning process
- Various mechanism of quality assessment

The study further revealed that the quality control system now in place, although in need of improvement, contributes to the quality of Russian higher education and science.

Freed, Jann E., and others, (1997) in their study on “A culture for Academic Excellence: Implementing the Quality Principles in Higher Education” revealed how the quality relates to higher education and described how the quality movement has evolved among postsecondary institutions. The components of an institutional culture are identified, ways to build a culture that supports the quality principles suggested and each of the quality principles explained briefly. The study further explored the eight principles or characteristics of effective organizations:
i) Vision, Mission and Outcomes driven  
ii) systems dependent  
iii) systematic individual development  
iv) decisions based on fact  
v) delegation of decision making  
vi) collaboration  
vii) planning for change, and  
viii) creative and supportive leadership.

Mohamed Abdul Halim, (2004) reported in his study on “Quality issues in the Higher Educations in Bangladesh” that Higher education in Bangladesh has expanded very rapidly in the last decade after independence. Higher education in Bangladesh is heavily dependent on government support and so it can hardly generate private funds to maintain its independent status and expansion. Governmental funding on such a large scale also has resulted in lowering of the quality, getting easy higher degrees and diplomas compromising the academic merit and competency. Out of 39 universities available in Bangladesh, 17 are public sector and the rest are private universities. To map out the quality in education is not an easy task. From different perspectives, the quality issues in education are viewed to be multidimensional. The key areas may be identified in the aspects of curriculum, role of teachers, learning resources, staff resources, organizational set up, teaching learning environment and assessment, appraisal and monitoring.

The study gave the following recommendations on quality improvement:

- Reorganization of curriculum should be made for making youth confident enough to speak, write, think and perform
- Admission to university courses should be highly selective and based strictly on merit
- Adequate facilities should be provided to teachers to undertake research
• Provision of adequate computer facilities through networking in institutions of higher learning should be made.

• Research in humanities and social science is directly related to contemporary life.

• Provision of adequate research facilities should be made mandatory in postgraduate colleges.

• Infrastructure and facilities of the colleges should be improved.

• Teaching and evaluation system should be improved qualitatively.

• Political interference in the autonomy of higher education should be removed.

• Teacher student ratio should be proportional.

• Mushroom growth of universities and colleges should be checked.

2.02.1. OVERVIEW OF THE STUDIES ON QUALITY AND ITS MOVEMENT IN HIGHER EDUCATION

• McLagan, Particia (1991) revealed in their study that quality requires continuous attention for its existence, continuance and excellence. Hence real commitment to innovation and continuous improvement on quality is demanded.

• Green and Harney (1993) in their study viewed that the quality of education and its different approaches depends upon requirement.

• Bureau of Indian Standards (1988) stated that the Quality is determined by the totality of its features and characteristics of product or service.

• Naudean (1992) revealed in his study that demand for quality in education originated within the various stakeholders of the Institution.
• **Mathews (1993)** revealed in his study that in four basic areas such as Curriculum, Operations, Overall Direction and Teaching and Research, the academic and Total quality Management are getting converge in its application

• **Haugh M.J. (1992)** in his study indicated that Educational Administrators made a paradigm shift to the principle of Total Quality Management for running of educational institutions

• **Schmidt, Warren, H. Finnigan, Jerane P (1992)** in their study traced the strategic implementation based on key success factors

• **Lenenberger John A. Whitaker Sheldon V. (1993)** expressed the need to provide training, support and research based to the teachers and administrators to implement total quality movement

• **Miller, Richard. I (1996)** in their study revealed that colleges and Universities would probably use more traditional model than TQM in future

• **Kezar, Adrinna (2000)** conducted a study on international higher education and examined that the accountability and quality movement have been going on for years in some countries

• **Kouptsov O, Tatur, Y (2001)** explained in their study that quality control system now in place although in need of improvement, contributes to the quality of Russian higher education and science

• **Freed, Jann E., and others (1997)** in their study mentioned eight quality principles or characteristics of effective organizations

• **Mohamed Abdul Halim (2004)** in his study identified the key areas for quality improvement such as curriculum, role of teacher, learning resources, staff resources, organization set up, teaching learning environment, etc.
2.03. STUDIES ON QUALITY ASSESSMENT OF HIGHER EDUCATION INSTITUTIONS

**Calder (1999)** noted that the Quality assessment is the evaluation of teaching and research quality in a specific subject. It is often used in an extended sense for the evaluation of an institution or part of it, for overall performance using both internal and external procedures. In the United Kingdom the aims of quality assessment is to assess the social relevance of an institutions programmes and the worth of its products in terms of societal goals.

**Hauderik (1992)** explored that in the field of education, the assessment of quality of education can not be only to orient students for it is mainly society that pays for the operation of the educational system. Therefore the views of other constituents of society also have to be considered.

**Eisemon, Thomas Owen et al (1993)** examined the “Higher Education Reforms in Romania”. In this study on Romania’s higher education it is revealed that higher education in Romania has been at crisis since 1989 and government strategies for revitalization including expanded access, increase in social science emoluments, spontaneous establishment of private institution and problems of limited resources have not been fruitful. It further stated the comprehensive reforms of the state’s role in financing and governance and the reforms strategies focused on accreditation, resource allocation and changes in academic employment.

**Bowden, John, Marton, Ference (1998)** revealed in their study “The University of learning, beyond quality and competence in Higher education” that the ideas of competency and quality movements in higher education definitions of learning outcome that deal with the unknown future
and to accountability as a consequence rather than a focus. It facilitated that the ways of teaching (bringing learning about), assessment (finding out what has been learned) and University management (organizing learning) should be based on facilitating learning outcome.

Further the study found the following major topics addressed for consideration in learning review:

a) Collective consciousness and the ethics of learning
b) Quality and qualities
c) Organizing learning
d) University of learning

James Richard (2000) exposed on "quality assurance and the Growing puzzle of managing organizational knowledge in Universities" that the important new issues for university administration: the complexity of managing corporate knowledge. In the case study presented the Australian Universities' evaluation and quality assessment activities, through which unprecedented databases, particularly on teaching quality have been collected and proposed that the new universities can enhance the management of knowledge.

Houston, Don, Maniku, ahmed Ali (1996) reviewed in their research study "Systems Perspectives on External Quality Assurance: Implications for micro states " that the Quality assurance in higher education is a mess; the problem of quality is embedded in complex sets of interacting issues that are of concern to many and varied stakeholders. Developing higher education systems that have responded to issues of quality through ‘best practice’ model of external quality assurance has produced mixed results. Systemic analysis using systems concepts and
critical systems thinking is used to explain the divergent conclusions about transferability of external quality assurance models. Selected reports of external quality assurance models from developing countries are reviewed. The study also examined the model adopted in the Maldivian higher education system, which is characterized, by its small size and scale of operation. Small emerging higher education systems contemplating the adoption of ‘best practice’ prescriptions for external quality assurance activities should consider carefully the fit of those prescriptions to the local environment, rather than taking for granted the appropriateness of generic models.

Gift, Sandra, Leo Rhynie, Elsa, Moniquette, Jacqueline (2006) revealed in their study thus: “Quality Assurance of Transnational Education in the English speaking Caribbean” that an examination of national and regional developments relating to quality assurance and accreditation systems in the three main countries having a campus of the University of the West Indies, Barbados, Jamaica and Trinidad and Tobago, provided an appreciation of some of the emerging provisions in the region to respond to the concerns of the stakeholders of the higher education sector as they relate to the quality of transnational education. The specific issues addressed included (a) national accreditation councils and the monitoring of imported education (b) domestic regulations for setting qualifications, quality standards and licenses for the quality of both imported and exported education programmes (c) provisions for monitoring the quality assurance programmes of foreign providers and the equivalence of programme content to that delivered in other jurisdictions (d) collaboration between local and foreign providers and relevance to local needs (e) the importance of a regional accreditation mechanism. The study concluded with a projection of future developments in
arrangements to monitor the quality of transnational education in the region.

Anderson, Gina. (2006) examined on “Assuring quality / Resisting Quality Assurance: Academics’ responses to quality in some Australian Universities.” Academics, although committed to quality in research and teaching, continue to resist quality assurance processes within their universities. This apparent paradox reflected a series of disputes surrounding issues of power, definition and efficacy. This article reported on a study of 30 academics from 10 Australian universities and details their responses to and critiques of quality assurance processes in their universities. It is argued that until university management, university quality agencies and academic staff in universities draw on mutually agreed understandings of this contested concept – quality – academics will continue to resist quality processes, treating them as games to be played and systems to be fed.

Mani,, Jacob (1987) did a study on “Educational innovations in the affiliated colleges of India, The Maharaja Sayajirao University of Baroda.” In this study report the researcher attempted to identify and examine the objectives, life cycle and consequences of some selected innovations adopted in the arts and science colleges in various parts of the country, with special reference to the recommendation in the Education Commission Report (1964-66). This study emphasized how innovations were accepted, implemented and institutionalized in colleges. The main objectives are:

a) to examine the conceptual basis and objectives of selected innovations in colleges
b) to find out by whom and how they were developed and diffused
c) to find out how they were adopted and implemented
d) to identify the factors which facilitated or constrained them and
e) to study the related aspects such as the valuation, personnel,
cost, consequences, change agents and dissemination of
innovations.

The sample consisted of 205 colleges with common ideas and
objectives, same managerial pattern and a shared historical background. The sample was drawn using the purposive sampling technique. The tools used to collect data included, institutional data sheet, check-list of collegiate innovations, Interview schedule and questionnaire. The data were analysed through qualitative techniques, which were supported by calculation of percentage, rank and rating of choices made by the respondents. The researcher reported the major findings: (a) with regard to examination of the conceptual basis and objectives of the innovations, it was found that innovative colleges re-emphasized, revised or reframed their objectives in the light of the Education commission's 1964-66) vision of education as an instrument of national and human development (b) with regard to the second objective, it was noted that the success of the innovations was affected by the change-oriented skills, knowledge, values and attitudes of the personnel involved in the change efforts. Effective human relations and personnel management also were found to be enhancing the productivity of the innovations (c) new educational concepts experienced a time lag between the proposal and implementation as a result of delay in obtaining sanction from the concerned authorities, resistance to the proposal from critics, slow diffusion and the period of planning and preparation (d) the study had identified 41 factors such as clarity and relevance of instructional goals, staff motivation, human and material resources, etc., that facilitated innovations. Similarly it located 21
factors such as lack of freedom for colleges to experiment, financial shortages, heavy work load of the staff, etc., that were found to inhibit such programmes (e) if formative and summative evaluation were built into the process of implementation, they were found to be facilitating the in-process function. Evaluation of a programme by external teams enhanced the objectivity and rigor of self-examination. Trained analysts and evaluators made the process more reliable and amenable to follow-up actions.

Kurup, M.R. and Thatte, L.R. (1991) conducted a study on “Pricing Higher education: A case study of Maharashtra, Independent study, Mumbai, V.G.Vaze College of arts, Science and Commerce”. The main objectives of this research study was to examine the extent of the resource crunch and its implications for progress in the sector of higher education in Maharashtra and to estimate the demand for and supply of seats for higher learning by the year 2001 and estimate the resource requirements for meeting this demand. In this research study five hundred and forty institutes of higher education were surveyed and responses were received from 42 colleges and seven universities in the State. Structured questionnaires for principals and students were used as tools to collect data.

The major findings of this study were: (i) Low levels of capital expenditure, inadequate funds from the government, etc., had damaging effects on the quality of education provided in institutions of higher education (ii) the resource shortage had affected science colleges more than commerce colleges (iii) The student – teacher ratio and per student expenditure on the one hand and standard of output and academic achievement of students on the other were positively associated (iv) there appeared to be a U-shaped relationship between the unit on the one hand and the faculty strength on the other and finally the study concluded that
institutions of higher education in Maharashtra were suffering from a severe financial crunch which has implications on the quality of higher education.

Buamk, Berylda Hedi-Pati (1989) had undertaken the research study on the reactions of students, teachers and administrators towards the changes made at the collegiate level in Maghalaya, North Eastern Hill University. The main objectives of the study were to review the main features of education at the collegiate level prior to and subsequent to the implementation of the 10 + 2 + 3 system of education and to study the reactions of students, teachers and administrators to the changes made at the collegiate level. For this study 150 students in the final year degree class, 40 college teachers with long teaching experience and 10 administrators from the State Education Department were interviewed and the data collected were used for data analysis.

The major findings of the study were: (i) opinions of students and teachers differed on reducing pressure on admission (ii) the majority of the students and teachers felt that the problems faced by migrant students would disappear with the introduction of the new pattern of education accompanied by the adoption of a common core curriculum. (iii) the majority of the students felt that the existing college curriculum was unrelated to the present day needs and aspirations (iv) regarding the introduction of common foundation course at the degree level, the opinions of students and teachers were different, with the former finding it useful and latter finding it a burden (v) among the problems faced by the students were those connected with textbooks, laboratory equipment, teaching aids, the type of questions set in examinations and the increasing unemployment among educated youth and (vi) teachers reported problems like shortage of laboratory equipment and textbooks, lack of facilities for
in-service education of teachers and pressure of time in completing courses.

Tripathi R.S. (1991) in his critical study of development of higher education in Uttar Pradesh since Independence examined the developments that have come up in higher education in Uttar Pradesh since Independence. The main objective is to study the facts and events which have influenced the development of higher education in Uttar Pradesh and to study the problems of higher education related to aims and objectives of higher education, curriculum of higher education, methods of teaching, evaluation, discipline, physical facilities, administration of higher education and employment and higher education.

The major findings of this study were: (a) the aims of higher education are not relevant to the present day needs (b) the courses of higher education have a lot of irrelevance (c) the only method of teaching that is used is the lecture method. Teachers are not even aware of the full implications of such methods as seminars, small group discussions, assignments, self study methods, etc., (d) the system of evaluation was the worst feature of higher education. Public examinations take up most of the time, leaving little scope for effective teaching. The system of grading and the semester system, which have been the main planks of examination reform, have not been successful and have not proved their practical utility (e) the current concept of discipline was not fully realized by the administration, the teaching community and the students. It is necessary to develop a correct philosophy of discipline based on internal qualities rather than on external imposition (f) physical facilities were found inadequate and those that were available were not properly put to use (g) the administration of higher education has been gradually
subjected to persistent government interference, which has eroded the academic accent in higher education (h) the study showed that there was no relevance between higher education and the employment of its products. This has created great imbalances between education and its utility.

Benal B.I. (1998) conducted a study on “A critical study of the development of higher education in the State of Karnataka during six Five year plans (1950 – 1985) with special reference to Karnataka University”. The main objectives of this research study were: (a) to study the development of higher education in Karnataka University, with respect to the quantitative growth, way of investment, sources of finance, library facilities, laboratories, hostel facilities, scholarships, administrative set up and the establishment of post-graduate centers (b) to understand the curriculum and its reconstruction (with regard to the needs of students and the society, and to know the purposes and outcomes of the curriculum) (c) to study the improvement of the quality of teachers (d) to study the problems of examinations and evaluation (e) to critically evaluate the nature and extent of development with respect to the trends in the developed states in the country and (f) to suggest steps for the improvement of higher education.

The major findings of the study were: (a) there has been a considerable increase in the quantitative growth of institutions, viz. affiliated, constituent colleges and the university postgraduate departments, during the Plan period (1950 – 1985) (b) the receipts and expenditures also significantly increased due to the development programmes initiated and implemented (c) the sources of income were increased to the best advantage of the educational institutions (d) the library at the Karnataka University level had expanded considerably and it
was supposed to be the second biggest in Asia (e) with regard to the modernization of science laboratories, it is worth mentioning that the departments of physics, chemistry and geology had been greatly expanded, and were offering leadership courses in their disciplines in the country (f) as far as student facilities were concerned, financial efforts had not been made to the extent expected by helping needy students at large and SC and ST in particular (g) the qualitative improvement in the affiliated colleges and also at the university was not very significant (h) hardly any efforts had been made for re-orienting in service training with up to date knowledge for the teachers recruited at the affiliated colleges and at the university level. It was also disappointing to note that the university authorities had not made any attempt to work on the academic problems of the teachers (l) university authorities made no consistent efforts to evolve new techniques and advices for evaluating the student’s progress through the examinations.

Billing David, Thomas, Harold (2000) examined “The International Transferability of Quality Assessment systems for Higher education: The Turkish experience”. The author in this research study reported that the pilot project which examined the feasibility of introducing a quality assurance system, originally developed in the United Kingdom, in Turkish Universities. Although a convergence between systems was observed, there emerged significant cultural, structural, political, technical issues that affected the transfer to the United Kingdom system to the Turkish system.

Dixon, Stella, Moorose, Rosemay (2000) in their study on “Self assessment for Improvement and preparing for Accreditation: Colleges and Self assessment” revealed that in this collection of materials the
authors expressed the self assessment manual and its companion publication on preparing for accreditation explains how further education colleges throughout the United Kingdom can use self assessment be achieved and document measurable improvements in their operation and services to increase chances for accreditation. The following topics are discussed:

- Importance of self assessment
- The role of observation in assessing and improving teaching and learning
- Dual purpose observations for self assessment and appraisal
- The process of quality improvement with special reference to retention and achievement

Mok, Ka Ho (2000) attempted a study on “Impact of Globalization: A study of Quality assurance systems of Higher education in Hong Kong and Singapore”. This research study report compared the implementation of quality assurance mechanism at the city university of Hong Kong and the National University at Singapore. This study discussed the public policy contexts in two countries, the introduction of ‘quality process review’ in Hong Kong, managerialism and the new emphasis on educational efficiency, institutional self assessment and the ideological basis of the quality assessment movement.

Jones, Elizabeth A. Richarde, Stephen (2000) studied on “NPEC Sourcebook on Assessment, Definitions and Assessment Methods for communication, Leadership, Information Literacy, Quantitative Reasoning and Quantitative Skills, NPEC 2005”. The study revealed that faculty, instructional staff, and assessment professionals are interested in student
outcomes assessment processes and tools that can be used to improve learning experiences and academic programs. The study examined the measures of students' skill assessment in communication, leadership, information literacy and quantitative reasoning. Further this sourcebook defines the most important outcomes in each of these critical domains. Assessment tools and resources are cited, including explanations of scope, availability, measurability, cost and other methodological concerns. Research is drawn from numerous publications that include in depth reviews of the assessment. Faculty and staff at colleges, accrediting agencies, federal and state government agencies and other organizations anyone who measures, reports or its interested in formation about student outcomes can benefit from this sourcebook.

Sadler, Royce. D (2005) conducted a study on “Interpretations of Criteria based Assessment and Grading in Higher Education”. The increasing use of criteria based approaches to assessment and grading in higher education is a consequence of its sound theoretical rationale and its educational effectiveness. This study is based on a review of the most common grading policies that purport to be criteria based. The analysis showed that there is no common understanding of what criteria based means or what it implies for practice. This has inhibited high quality discourse, research and development among scholars and practitioners. Additionally the concepts of 'criteria' and 'standards' are often confused and despite the use of criteria, the fundamental judgment teachers make about the quality of student work remain subjective and substantially hidden from the students view. As they stand none of the approaches identified in the survey is fully capable of delivering on the aspirations of criteria based grading. Shifting the primary focus to standards and making criteria secondary could however, lead to substantial progress.
Madhusudanan Pillai K.N. (2006) traced in his study on "Stakeholders of Higher Education and their role in Quality Assurance" the aspects which influence the current pattern of education, such as Government is no longer the principal employer, jobs are based on skills and new knowledge, High frequency of mobility at job, Task based remuneration, Knowledge based economy and global job market, Highly competitive and demands excellence in performance and require continuous upgradation of knowledge and skill enhancement. The stakeholders, who are contributing for the development and success of the institution, are the people responsible for the maintenance of quality and its enhancement. How is their responsibility on the development? Their research findings revealed that the Government / Management that establishes the institution has the responsibility to define the purpose of its establishment through a vision statement and spelt out mission and short term goals. The goals and objectives translated into programmes finally decide the success of an institution. They should assure the welfare the employees and develop clear mechanism for the redressel of their grievances. The Principal of the institution has the responsibility to frame the policies in agreement with the vision and mission of the institution. He has to turn up the philosophy into practice evidenced by the achievements of the institution. As a facilitator it is his duty to give sufficient encouragement to faculty to research and consultancy and also to create opportunities for faculty development programmes. Students are the primary stakeholders of education; to borrow a term from business they are the customers. Quality institutions have developed structured format to get feedback from the students on the teaching learning process and their experience in the campus as an attempt to make education more student centric. The institutions give emphasis to build up the leadership
quality amongst students through extra curricular and co-curricular activities. Parents are another important stakeholders of the higher education. They are really concerned about the quality of the institution, as it would ensure the future of their wards. The opinions formulated to them forms the basis of social accreditation of all institution. Alumni, the old students, are potential human resource, which can be meaningfully tapped to the institution for the growth and development. They are the ambassadors of the college who generate the goodwill among the public. Their services can be utilized for generating resources providing expertise and employment opportunities. The study concluded that an educational institution becomes a center of excellence only through the concerted and collective efforts of all the stakeholders. Edward Deming says, 'A system is a network of interdependent components that work together to try to accomplish the aim of the System Management of a system therefore requires knowledge of the interrelationships between all the components of the system. The secret is cooperation between components towards the aim of the organization.

Meade, Phil, Morgan, Margaret Health and Chirta (1999) in their study on "Equipping leaders to capitalize on the outcomes of quality assessment in Higher education" revealed that quality movement in Higher education outpaced the capacity of academic leaders to respond. The study further described a leadership development programme at the University of Otago, which provided academic and administrative leaders with opportunities to enhance those skills and attributes needed to meet the challenges of change arising from audit and other reforms.

Curtis, Stephen M, Gay, Judith, Griffin, Mary, et al (1997) attempted a study on "Leadership Institute: Developing Leaders and
Maintaining Access” The study infused some of the key elements that have brought success in Community College of Philadelphia's first 4 decades may not be as effective in the coming 40 years. Due to substantial funding decreases and changes in enrollment patterns, the college's operating context has fundamentally changed. This is ever so as the Institutional leadership holds fast to a mission of providing accessibility to an affordable, quality education for all who may benefit. These issues, coupled with the anticipated retirement in the coming decade of leaders at the institution, drove the 2002 creation of the Leadership Institute. The plan is to develop and sustain leaders who will meet new challenges in this era of rapid change. This study described the Leadership Institute, whose goals include understanding critical, regional and national trends that influence community colleges, and developing skills such as team building, conflict resolution, grant writing and decision making in an institutional context.

Evans G.R. (2000) did a study on “Quality assessment of the Administration and Management of Universities; Ways and means”. The study discussed the 1992 British Education Reform Act and identified weakness in the existing accountability structures in both old and new universities and related implications for academic freedom. This study further argued that reviewing the quality of administration might be as important reviewing the quality of teaching and research.

Brennan, John, shah, Earla (2000) conducted a study on “Quality assessment and institutional change: Experiences from 14 countries”. The study has made a review and studied on the effects of National and Institutional quality management systems in higher education institution in 14 countries and by drawing on 29 case studies. They developed a
conceptual model of relationship between quality management and institutional change. Emphasizes the importance of powers and values in the establishment of quality management.

Mclood Marshall W. Cotton, Donak (1998) revealed in their study on “Essential decisions in Institutional effectiveness Assessment” that the latest evolution of the accountability movement in Higher Education to be that of institutional effectiveness assessment and also outlined a model of key factors relating to institutional effectiveness planning and discusses the basic decisions involved in implementation.

Stewart, Robert Grisham (1996) explained in their study on “Key process benchmarking for continuous improvement in higher education” dealt with the identification and verification of key process used by Higher Education quality administrators to implement continuous improvement programs and benchmarking processes. In this research study the responses were tabulated for 10 key processes and 34 associated performance measures. The study identified the following key processes as detailed below:

a) Teaching / Learning
b) Enrolment management
c) Cultural environment
d) Strategic planning
e) Resource acquisition and development
f) Institutional management and governance
g) Research activity
h) Community outreach
i) Communicating the institutional image
It was found that the (a) Teaching / learning and enrolment management to have highest agreement rate (b) students retention data & exit examinations are identified as teaching and learning benchmarks (c) Retention data, student, enrolment and student satisfaction were identified as appropriate benchmarking measures for enrolment management.

Montana State Dept. of Public Instruction Helena (1993) did a study on “Program assessment: A six step process to curriculum improvement”. The study explained that student assessment is required to follow curriculum development in each program area. The guidelines in this study facilitated the co-operative efforts of teachers, curriculum developers, administrative and school committee of parents and community members. Six types of program assessment are highlighted:

- Determine whether the evaluation is to be formative or summative
- Focus on a manageable number of important program related goals
- Select or construct suitable assessment instruments
- Use data gathering design consistent with the orientation of the evaluation
- Use data analysis procedures that yield understandable results
- Report and evaluate reports to make recommendations and modify program as indicated

Marwick, Judith, D (1998) undertook a study on “Academic Outcomes Assessment, A Tool for Student learning”. In this study the author explored the student learning as a direct outcome of the teaching
process and identified the increased focus on finding more effective instruments to assess student learning and ensure systematic feedback from the data. The study further revealed that according to North Central Association Consultant – evaluators, criteria for assessment programme should include structure, systematic workings, continuity, administrative commitment, long term plans and a budgeting process. Further principles of good practices for student assessment as stated by the American Association of Higher Education are listed, as well as an explanation of several examples of different forms of academic outcome assessment are given.

Wise, Arthur and E. Leigrand, (1996) studied on “The Profession based accreditation: A foundation for High quality teaching”. This study emphasized the idea of teacher growth and development as a continuous spanning a teaching career guides the National Council for Accreditation for Teacher education is emerging standards. The 1995 NCATE standards revision emphasized the performance and performance based assessments, Professional collaboration and community, technology and diversity of curriculum, student body and faculty.

Stanley, Elizbeth, C.Patrick and William. J. (1997) conducted a study on “Teaching and Research Quality indicators and the shaping of Higher education”. The study reported two important sets of performance indicators for Institution of Higher education:

- Research quality ratings
- Teaching Quality ratings

Both of these influence the government granting. Further the correlation between two ratings and possible consequences of policies
which reshape the higher education. The study revealed that on comparison of quality assurance assessment approaches in the United Kingdom and United States of America, it was found that US higher education is much larger, more heterogeneous and has less government control than UK higher education.

Bastick, Tony (1999) conducted a study on “Quality Assessment for Teachers of continuing education and training programmes”. The research study report revealed three ability frameworks in a single quantitative measure of the quality of teaching that can be used as an administrative decision point. The study further revoked that the teacher explained to the students the three abilities research has identified as essential to effective teaching:

a) Technical skills
b) Professional competency
c) Professional attitude

Further the students are asked to rate their assessment of each of these areas and their expectations of how the area should be fulfilled in the course and instructors rate themselves in each area. Students and instructors rating are compared and resulting number is makes an evaluative decision point.

Barrie, Simon S, Barrie, Ginns, et al (2001) explored in their study on “Early impact and outcomes of an institutionally aligned, student focused learning perspective on teaching quality assurance” that an evidence based quality assurance system for teaching and learning, which takes as its starting point, a well researched theoretical perspective on student learning in higher education. The authors argued that the explicit use of a relevant theoretical base promotes coherence between quality
assurance and improvement processes. They outlined the principal features of their University's quality assurance strategy, systems and processes, and describe how the university's teaching quality assurance policy and systems have been implemented. They then consider the extent to which the project has achieved its goals of fostering an evidence-based approach to teaching consistent with the student learning perspective on which the policy and systems are based. They also presented data on student learning experiences showing reliable changes in the quality of the student learning experience. They discussed the significance of these changes, with a particular focus on changes in the experience of commencing first year university students.

Poliakoff, Anne Rogers, Ed., (2002) studied on "Teacher preparation: Assessing Teacher quality, administrative support, standards-based teacher preparation". This collection of research studies focused on the preparation of teachers by university based education programs. The titles are: "The Steps that Support P-12 Learning and Achievement" (Diana Rigden), which describes the standards based Teacher Education Projects for improving student learning. The Responsibility for Assessing Beginning Teachers (Bary R. Galuzzo) which presents three features essential to high quality beginning teachers (being smart, capable and persevering) "It takes a college" Administrative support for teacher preparation"(Thomas E.Dasher), which describes the administrator's role in a collaborative approach to preparing teachers. "Linking Teacher Quality to student Achievement through Assessment (Russell French), which looks at the level of accountability that as reached the teacher education community and "A case for A certain kind of Teacher Education" (Frank B.Murray) which discusses the need for a new teacher education degree, grounded in the liberal arts and pedagogy.
Knight, Peter (2006) revealed from his study on "Quality Enhancement and Educational Professional Development" that there is a strong international interest in the enhancement of teaching quality. Enhancement is a big job because teaching is an extensive activity. It is a complex job because learning to teach is not, mainly, a formal process; non formal, practice based learning is more significant. These two points, extensiveness and practice based learning, lead to the claim that enhancing the quality of teaching implies the creation of working environments that favour certain kinds of professional formation. This analysis is different from mainstream thinking about educational professional development and has significant, systemic implications for quality enhancement practices and suggests fresh directions for quality enhancement research.

Gupta, S.K. (1990) examined in their research study on "Teaching learning process in Higher education, Indian Educational Review" that the concept of teaching learning process, its main components and developing the methodology for effective teaching are dealt with. The main objectives are : (a) to define the term teaching learning process (b) to determine the main components of Teaching Learning Process and (c) to develop the methodology of above components, i.e. objectives of teaching, organization of learning experiences and the process of evaluation and their use for effective teaching. The major findings of the study explored that the objectives of teaching learning experience and evaluation are interlinked with each other and further the learning experiences could be brought about through a number of ways such as classroom interactions, library, Laboratory work, radio, TV, films, field trip, museums, seminars, tutorials, assignments and other similar situations. The teaching should
make a decision about it. Evaluation, the third important component of this model is closely related to teacher’s goal. It included measuring the extent of achievement, objectives and suggesting remedial instructions to the learners for enrichment of learning experiences and to reach the goals.

Surya Rao, U. and Surenthiran, N. (2004) explored in their study on “Faculty Development in Higher Education” the key issues on higher education such as increasing demand relevance, quality and excellence, governance and resources. Among the five qualities, excellence in higher education is conceived as key factor for achieving economic objectives, i.e. Creation of knowledge workers to be used within and overseas. To attain the standards set in the higher education the authors raised certain issues and provided roadmap to tackle those issues. The need for faculty development programme as mainly to ensure continuous up gradation of persons who are already in the teaching profession, to create intellectual capital, to develop instructional skill and instructional material, to develop research and innovations and to enable them to undertake testing and consultancy services for industries and other organization. Behind the effective teaching and learning process, still more efficiencies are required by the teachers due to the changes in the development of educational systems and industrial scenario. Proficiency in subject matter, through knowledge of industrial field processes and practices, knowledge and skills in curriculum development process, Knowledge and skills for developing print and non print instructional resources, Pedagogical knowledge and skills for planning, delivering instruction and assessing of students performance including skills form effective communication and learning to learn, problem solving and other soft skills like self motivation, leadership, etc and research skill have become essential to make teaching competency perfect.
With the help of available infrastructure the training may be given to
the faculty and other staff in the different modes, such as Contact
programmes, Distance learning, Use of Internet, Modular programmes. By
adopting the above roadmap the author strongly felt that Indian Higher
education is scaring up to face the new challenges of 21st century.
Teaching community must awaken to take up the new task of building the
nations to learn their responsibilities and take on individual leadership for
change.

Steward, Robert and Grisham (1996) in his study on “Key process
benchmarking for Continuous Improvement in Higher Education”, the
identification and verification of key processes that could be used by higher
education quality administrators to implement continuous improvement
programmes and benchmarking processes. East Tennessee State
University's continuous Improvement Key Process Relationship Matrix was
used as the basis of a 44 item questionnaire sent to a sample of 49 higher
education institutions: 26 replies were received. The responses were	
tabulated for 10 key processes and 34 associated performance measures.
Key processes were: (1) teaching / learning (2) enrollment management
(3) cultural environment (4) strategic planning (5) resource acquisition
and development (6) institutional management and governance (7) research activity (8) community outreach (9) learning
environment, and (10) communicating the institutional image. Of the key
processes, the study found teaching / learning and enrollment
management to have the highest agreement rate. Student retention data
and exit examinations were identified as appropriate teaching and learning
benchmarking measures; while retention data, student enrollment and
student satisfaction were cited as appropriate benchmarking measures for
enrollment management.
Wynne (1994) in his evaluative study on “concepts of Quality in Student Assessment”, reported that the method of moderation, quality assurance and quality control which are used to enhance the quality of student assessment. Further, it described that the quality in assessment is seen as the provision of information of the highest validity and optimum reliability suited to a particular purpose or context.

The author described the approaches to quality control are:

- Use of reference or scaling tests for statistical moderation
- The inspection of samples by post
- The inspection by visiting moderates
- External examination
- Teacher requested moderation
- Group and consensus moderation of internal assessment

The quality of teacher assessment can be enhanced through moderation produces that support professional development.

M.R. Kurup, (2006) stated that one of the most important areas for the management to play almost an exclusive role is the development and maintenance of infrastructure. Infrastructure should include a wide range of supporting services such as gymkhana, gymnasium, playgrounds, canteen computer centre, multi-media conference hall, library and hostel among others. While conceptualizing the institution, it is important to plan for not only for the present but also for future. Accordingly infrastructure should be adequate as per the norms of UGC and AICTE. Every department requires advanced equipment for teaching and research. Students, staff and faculty members should have access to the use of new
technology, including internet. Other related areas are maintenance, housekeeping, institutional ambiance and cleanliness. The rate of wear and tear may be very high in educational institutions and the management may have to ensure timely replacement of equipment and proper maintenance of the facilities, for which funds may not be available by way of government grant.

Sunanda Uday chande (2005) revealed in their study on ‘performance indicators of an institute of Higher Education’ the purpose of performance indicators, viz. Provide reliable information on the nature and performance of the educational institutions, disclose a number of aspects of the student experience at higher education institutions, allow comparisons between institutions wherever appropriate, enable institutions to benchmark their own performance, inform policy developments, contribute to the public accountability of higher education and illustrate the diversity of higher education institutions. The research was done to study perception of performance indicators of college teachers. The respondents gave maximum importance to student indicators, institution indicators and teacher indicators.

Three types of indicators, viz. Quantitative, Narrative and combination of Quantitative and Narrative are used in this study. An attempt was made to gather information from teachers about their perception of performance indicators of an institute of Higher Education. Twenty-eight teachers teaching in our under graduate college responded. The data analysis revealed that with respect to number of indicators, the respondents gave maximum importance to student indicators, institution indicators and teacher indicators. Relatively speaking, research, higher education outcome and syllabus indicators were not given much
importance. There was no mention of finance indicators and supporting staff in any category of indicators. Maximum number of teachers i.e. 85.71% felt that infrastructure such as Library, laboratory, classrooms, space for extra-curricular activities, computers and other A.V. aids was a vital indicator. Quality of teachers was given importance by 75% of the respondents. Well-designed and relevant curriculum and employability of the students were also important indicators as mentioned by 60.71%. Collaboration with industry was quoted by 42.85%. Outreach programme and Research and publications were indicators of better performance as reported by 35.71% respondents.

The study concluded that knowledge about performance indicators enlarges the vision of looking at institutions of higher education. Types, purposes and characteristics of the indicators enable you to analyze the institutional performance better. Shared perception of all the stakeholders gives the direction to progress and development. Thus awareness of performance indicator enables all the parties of the educational system to have the suitable focus on education.

Sharma J.P. (2006) in his study on "scope, objectives and functions of Academic Staff Colleges" presented the results of a survey conducted to know the views of the participating teachers about the relevance of the orientation and refresher programmes conducted by the center for professional development in higher education. A survey of the perception of the teachers, about the relevance of the refresher / orientation courses attended by them was conducted by administering a structured questionnaire on a sample of teachers, lecturers, senior lecturers and Readers belonging to different departments of the Delhi University and colleges affiliated to it. The questionnaire collected the perception of the responding teachers on various aspects of the refresher
and orientation programmes conducted. In all 146 teachers responded to the above said questionnaire, 78 lecturers, 38 Senior Lecturers and 30 Readers and the gender wise distribution indicates 83 were male and 63 were female respondents.

The basic objective of this study was to assess the contributions of Academic Staff colleges on the continuous development and professional growth of the teachers. In order to judge the effectiveness of the refresher and orientation programmes conducted by Centre for Professional Development in Higher Education (Academic Development College of Delhi University), a sample of teachers were asked whether they find such courses to be relevant or otherwise, in respect of the following four aspects: (i) Teaching work (ii) Personal growth (iii) Research work (iv) Further study.

The result of the study stated that the faculty members, lecturers, Senior Lecturers and Readers of several departments of the University of Delhi and its affiliated colleges reveal that a vast majority of the respondents perceive the orientation and refresher courses attended by them to be relevant and helpful in their ‘teaching work’, ‘personal growth’, ‘research work’ and ‘future study’.

Julian, Frank (1989) did a study on “Outcomes assessment: Past, Present and future” The study envisaged the requirement of new federal regulation for all regional accrediting agencies to ‘Place greater emphasis on the consistent assessment of student achievement as a Principle element in the accreditation process, which have large impact on student development professionals.

Fisher, Caroline, Weymann, et al (2000) in their a review on “Quality Assessment of college admission processes” revealed that the
admission process for a masters in Business Administration Program were using assessed by quality improvement techniques, such as customer surveys, benchmarking and gap analysis. The analysis revealed that student dissatisfaction with the admission process may be a factor influencing declining enrollment cycle time and number of student contacts were identified as critical success factors in the admission process.

Srinivas G. (2004) in his study on "SWOT analysis of Assessment and Accreditation Process" mentioned that the NAAC came into existence on 16th September 1994 with five major objectives to grade institutions of higher education and their programmes, to stimulate the academic environment and quality of teaching, research in these institutions, help institutions realize their academic objectives, to promote necessary changes, innovations and reforms in institutions and to encourage self evaluation and accountability in higher education. Thus NAAC's role is to safeguard the quality. It has to facilitate the institutions to show their accountability to stakeholders, demonstrate effectiveness and thus justify their existence. The study reviewed the Strengths, Weakness, Opportunities and Threats. NAAC and UGC are working together to address some of the issues. Recently several emerging problem areas have been identified and being remedied. Most significant among them is providing financial assistance to the institutions recognized under 2f & 12 b of UGC act. It has recently brought out grievance redressal guidelines to give an opportunity to institutions to ventilate their grievances. Studies are also being conducted to evolve core quality indicators based on unit cost, criteria for admission, number of working days, library and infrastructure, student aids students results, research achievements etc., towards development of quantification system.
Assessment and Accreditation is an evolving process. Several efforts are being made to continuously enhance the quality of methodology and instrumentation. Thus NAAC itself is a learning organization. Assessment and Accreditation has come as a great experience for higher education institutions. It gave 'wake up' call to them to shed their sluggishness and reorient themselves towards efficiently fulfilling the aspirations of the students. Thus ensuring quality of higher education is nothing but providing quality of life to the citizens of the country.

**Accreditation Outcome – Emerging issues for policy planning and Systemic action (NAAC – 2005):** The performance review research analysis of the accredited institutions of four states, namely Karnataka, Kerala, Tamilnadu and Haryana, have been undertaken by the National Assessment and Accreditation Council focusing attention on quality educational delivery to meet the emerging challenges of higher education. As a post accreditation initiative for quality sustenance and enhancement, NAAC has adopted a state wise approach to make the analysis of the Assessment Reports, where a critical mass of institutions have been assessed. The major purpose of these state-wise analysis of accreditation reports is multifold i.e. on one hand to enable an understanding of the current state of affairs by all concerned and to identify the strengths and weaknesses of the accredited institutions to suggest remedial measures for their further qualitative development and on the other hand to provide an action plan to the facilitators and the stakeholders for quality enhancement action. Four such State reports have been prepared for the States of Tamilnadu, Karnataka, Kerala and Haryana. After circulating the reports to the State Education Departments, Universities and Colleges, which have been accredited, state wise workshops have been organized in the respective States. The emerging issues were discussed and
deliberated by the different stakeholders. There were two types of actions suggested in these workshops, one for systemic action by the institutions and its constituents and the second type was concerned with policy level changes or decisions, which enables institutions for Quality Sustenance and Quality Enhancement.

The common issues emerging out of the four state-wise workshops and Plan of action (Karnataka, Kerala, Tamilnadu and Haryana) are detailed below:
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<th>Promoting research culture</th>
<th>Orient the faculty regarding research proposals, research funding and research management</th>
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<td>Establish industry linkages and networking with different institutions</td>
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<td>Ensure adequate funding for research, every faculty should be involved in some research projects</td>
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<td>Enhance research input (funds and facilities) and output in terms of projects and publications</td>
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<td>Establish Adult and Continuing Education and Extension programmes</td>
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<td>Encourage and ensure faculty consultancy for research and other projects</td>
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<td>Adequate Teaching staff</td>
<td>Adopt a policy for appointing adequate quality staff for each institution</td>
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<td>Government needs to give necessary approval for the same</td>
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<td>Enhance the state budget for higher education</td>
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<td>Encourage government and private colleges to mobilize additional resources for enhancing teaching, learning and extension functions</td>
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<td>Strengthening library</td>
<td>Enhance library resources and computer facilities</td>
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<td>holdings and services</td>
<td>Provide infibnet / Delnet services and orient faculty and students</td>
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<td>Formalizing the feedback</td>
<td>Formalize and collect regularly feedback from the clients, community and employees. Take follow up action</td>
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<td>Enhancing computer</td>
<td>Provide adequate computer and Internet facilities for enhancing teaching and research activities</td>
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<td>Increasing program options,</td>
<td>Reframe the curriculum to make it more relevant and up to date and flexible</td>
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<td>curriculum updating and</td>
<td>Diversify curriculum and enhance the curriculum options with expert consultations before organizing the formal board of studies and Academic council meetings</td>
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<td>providing choice based</td>
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<td>Making teaching, learning</td>
<td>Facilitate more innovative methodologies of teaching and learning other than the lecture mode alone</td>
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<td>more participatory and ICT</td>
<td>Facilitate ICT enabled teaching learning</td>
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<td>enabled</td>
<td>Undertake reforms in evaluation</td>
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<td>Infrastructure facility and</td>
<td>Enhance infrastructure and learning resources</td>
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<td>learning resources</td>
<td>Develop a master plan for infrastructure development</td>
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<td>Career guidance and</td>
<td>Provide adequate support services to students in terms of guidance and counselling</td>
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<td>Organization and management</td>
<td>Participative and transparent management system appraisals</td>
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<td>IQAC</td>
<td>Make sure every institution has a Quality Assurance Cell to ensure continuous improvement in the entire operation of the institution by timely, efficient and progressive performance of academic</td>
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2.03.1. OVERVIEW OF THE STUDIES ON QUALITY ASSESSMENT OF HIGHER EDUCATION INSTITUTIONS

- **Calder (1999)** explained in his study that the access to the social relevance of offering programmes and its product worthy enough to societal goals.

- **Hauderik (1992)** revealed that Quality assessment of education is mainly society oriented since the society pays for operation of educational systems.

- **Eisemon, Thomas Owen and et al (1993)** in their study examined the Comprehensive reforms of State's role in financing and governance.

- **Bowden, John, Narson,, Ference (1998)** revealed in their study that the Assessment must focus on learning outcome to ensure accountability.


- **Houston, Don, Maniku, Ahmed all (1996)** in their study revealed the adoption of best practices prescription to local environment rather than taking generic models.

- **Gift, Sandra, Leo Rhynie, Eira, Moniquette, Jacqueline (2006)** examined, in their study, the projection of future developments in arrangements to monitor the quality of transnational education in the region.
• *Anderon, Gina (2006)* in their study stressed the need for mutually agreed understanding among the university management, university quality agencies and academic staff of the contested concept of quality assurance.

• *Kurup M.R. and Thatte L.R. (1991)* in their study state that financial crunch in the state of Maharashtra reduce the quality of higher education.

• *Buaunk, Berylda Hedi-Pedi (1989)* in their study on review of main features of collegiate education, found the irrelevance of programme, admission process and shortage in learning material facilities.

• *Benal B.I. (1998)* in their study revealed the insignificant qualitative improvement and found that there is no consistent efforts by the authorities to evolve new techniques for evaluating the students programme.

• *Tripathi R.S. (1991)* in his study, states that the assessment ensures the relevance between higher education and the employment of its products, but sometimes revealed great imbalance between education and its utility.

• *Mani Jacob (1987)* revealed in his study that educational innovation in the colleges happened by means of reframe and revision of curriculum, effective human relations, external teams of objective evaluation.
• Dixon, Stella, Moorse, Rosemay (2000) in their study, confirm that self assessment is reliable document to measure improvement in functional operations.

• Mok, Ka Ho (2000) in their study reviewed the institutional self assessment and emphasis that educational efficiency are ideological basis of quality assessment movement.

• Billing David, Thomas, Harold (2000) in their study revealed that Cultural, political, technical issues in quality assurance systems affect international transferability of quality assessment systems for higher education.

• Jones, Elizabeth A: Richarde, Stephen in their study, state that students outcome assessment is a primary tool that can be used to improve learning experiences and academic programmes.

• Sadler, Royee. D (2005) analyzed in their study the criteria based approaches on assessment and grading in higher education.

• Madhusudanan Pillai K.N. (2006) in his study revealed that educational institutions become a center of excellence only through the concerted and collected efforts of all stakeholders.

• Meade, phil; Morgan, Margaret Health, Chria (1999) in their study, state examined that the capacity of academic leadership are invited to enhance their skill to meet academic challenges.

• Curtis, Stephen M ; Gay, Judith, Griffin, Mary, Johnson, Joan, Tobia, Susan (1997) in their study, found that the institutional leadership hold responsible for providing accessibility to an affordable quality education to the beneficiaries.
• Evans G.R (2000) found in his study that review in quality administration as Teaching and Learning is much important.

• Breunan, John, Shar,Earla (2000) in their study developed a modal of relationship between quality management and institution's change.

• Mclood Marshall W. Cotton, Donak (1998) in their study, listed the Key factors regarding institutional effectiveness and its implementation.

• Stewart, Robert Grisham (1996) revealed in their research study that there is highest agreement rate between teaching - learning and enrolment management, teaching – learning benchmarks, student enrolment, retention data and students satisfaction were identified as appropriate benchmarks

• Montana State Dept. of Public Instruction Helena (1993) identified in their study, the six types of programme assessment to evidence curriculum development.

• Wise, Arthur E. Leigrand (1996) in their study emphasized the performance based assessments on teacher growth and development.

• Marwick, Judith,D (1998) revealed in their study the criteria for programme assessment and different forms of outcome assessment.
• **Stanley, Elizebeth, C. Patrick, William J. (1997)** identified in their study that Teaching quality rating and Research quality rating are two important performance indicators.

• **Bastick, Tony (1999)** revealed in their study that the technical skill, professional competency and professional attitude are essential for effective teaching and teaching assessment.

• **Barrie, Simon S. Barric, Ginns, et al (2001)** in their study suggest an evidence-based approach to teaching consistent with the students learning perspective.

• **Pollakoff, Anne Rogers, Ed., (2002)** in their study, stress the need for teachers' quality by linking with students' achievement.

• **Knight, Peter (2006)** revealed in their study that the extensiveness and practice-based learning are important for quality enhancement.

• **Gupta S.K. (1990)** in his study states that appropriate learning materials should be provided and measuring teaching learning would help to reach the goals.

• **Surya rao U and Surenthiran N, (2004)** explored in their study the need for faculty development programme to pruning their skills to take up new task of building the nation.

• **Steward, Robert and Grishan (1996)** revealed in their study that the teaching / learning and enrolment management have highest agreement on assessment.
• Wynne (1994) revealed in his research study that the quality of teacher assessment can be enhanced through moderation produces that support professional development.

• M.R. Kurup (2006) explained in his study that the Infrastructure facilities play vital role in institutional development, the institution to be provided with sufficient infrastructure.

• Sumanda Uday Chande (2005) in his research study on “performance indicators of Higher education” deals with on the availability of needful infrastructure, as it is a vital indicator for higher education institutions.

• Sharma J.P (2006) in his study on “scope objectives and functions of Academic Staff College” reported that orientation and refresher courses attended by faculty members are to be relevant and helpful in the teaching work, personal growth, research work and future study.

• Julian, Frank (1989) revealed in their study that students’ achievement is a principle element in accreditation process.


• Accreditation Outcome assessment analysis undertaken by NAAC (2005) revealed the needs for improvement required in each dimension.
2.04. STUDIES ON QUALITY ACCREDITATION OF HIGHER EDUCATION INSTITUTIONS

Marti, Edwardo. J. (1993) in their study on “The impact of Accreditation on Small colleges” identified the effects of preparing for an accreditation visit on small colleges, focusing on best use of limited resources and appropriate responses to the review agency’s report. Further it suggested for college presidents on garnering collegiate and community goodwill during the accreditation process.

Costello, Daniel E. (1996) revealed in their study on “Accreditation: Impact on Faculty Roles” new mission linked accreditation standards of the American Assembly of collegiate school of business represent a fundamental change in how business schools operate. Further the study emphasized on Strategic Planning, Stakeholders participation, Faculty team and continuous improvement will encourage institution cultural change and faculty responds with greater accountability and productivity.

Rogers, James T (1996) studied on “Strengthening Accreditation: A Presidential Imperative” The study critically reviewed the role of accreditation in American Higher education and shortcoming related to its inconsistency and lack of rigor. Further the study exposed the creation of Council for Higher Education Accreditation – CHEA (1996) to oversee accreditation activities and described CHEA’s organizational structure and analysis its impact on accreditation and educational institutions.

Academic Senate for California Community College (1996) in their research study on “Faculty role in Accreditation (adopted Spring 1996) described that the Western Association of Schools and colleges at
California community colleges examined the role of faculty in the preparation and validating the information in the self study through interview with faculty, staff, administrators, students and through visit of classroom, offices and facilities. The report also further recommended to increase faculty participation in accreditation process and the faculty involvement in the writing of college self studies and involvement with visiting team.

Commission on Higher Education Philadelphia, PA Middle State (1999) traced on “What is Accreditation” explained the guides enunciated the process of higher education accreditation and role of various institutions in accreditation and the Institutional and program accreditation. Further it categorized the series of commonly asked questions with answer and they are the standards an institution must to be accredited, accreditation procedures.

Dill, David D, and et al (2001) conducted a study on “Accreditation and Academic quality assurance: can we get there from here?”. They explained that despite recent rejection of proposals for National reform of college accreditation, a well-established system of regional, voluntary self-regulation offers the best vehicle for correcting imbalance in educational quality assurance. It further stated that the accreditation can help restore public faith in voluntary self regulation by encouraging development of institution based teaching, learning quality assessment and academic audits.

Faulkner, Jane B (2002) in their study on “Balridge Educational quality criteria as Another model for Accreditation in American community
colleges” explained the work of Deming and others which contributed to the creation of the Malcolm Balridge National Quality Award Program criteria, a quality framework used to measure institutional effectiveness in the United States. However, in this research survey questionnaire was sent regarding key aspects of Balridge educational quality Criteria as they relate to institutional planning in community colleges to 202 community college leaders. The survey included 6 qualitative questions and 10 demographic questions. Finally the author emphasized that there can be more interest in the Balridge criteria by accrediting associations than by Community college leaders.

Arslan, Hasan (2002) explained in their study on “Quality versus quality in Turkish higher education” dealt with the comparative quality of Turkish Universities to provide information and data for prospective students, advisors, university administrators and policy makers. Turkey has more than 70 private and public universities, whereas the higher education quality assessment, rating and ranking research would facilitate competition among higher education institution and provide the basis for further studies of Turkish higher education.

Yoginder Verma (2004) in his study on ‘Accreditation and Thereafter: A model for Quality enhancement in Higher Education Institutions’ analyzes the accreditation process which affords the institution an opportunity for making self critique. It becomes aware about the quality parameters and also can truthfully know where it stands on the seesaw of strengths and weaknesses. In a chase for higher grade, the institution may try to hide certain weaknesses. But it remains a fact that it is mindful about its weak spots. The observations of the peer Team further help the institution to understand its pitfalls and also the strong points. In their
They found the essential pre-requisites for quality education: National policy on Education and Government's Commitment, Commitment of Quality assurance Agencies, Academic leadership, Organizational Restructuring, Quality enhancement interventions, Awareness campaign, diagnostic meetings, Institutional vision, mission and objectives, Creating institutional culture, Education and Training. The study concluded that it is becoming imperative for higher education institutions in the country to become quality conscious. They have to become more professional and committed in their thoughts and action. While utilizing NAAC's evaluatory reports and their own SWOT analysis, the institutions should utilize the principles of TQM. Any quality enhancement efforts without a focus at institution's vision, mission and objectives will perhaps be futile. It is only quality institutions, which will be able to stand the aggressive competition from the transnational institutions in the forthcoming WTO regime. At the same time, the government has to review its national policy on education and create quality driven institutional culture in the country. Another challenge facing the country is to provide ample opportunities for higher education to the deprived and those living in the rural and remote areas of the country.

2.04.1. OVERVIEW OF THE STUDIES ON QUALITY ACCREDITATION OF HIGHER EDUCATION INSTITUTIONS

- Marti, Edwardo. J. (1993) outlined in their study the limitation on the accreditation and garnering collegiate and community goodwill.

- Costello, Daniel E. (1996) revealed in their study the institutional cultural change and faculty respond with greater accountability on the effect of accreditation.
• Rogers, James T (1996) examined the accreditation activities of council for higher education accreditation and its impact on accreditation of educational institution.

• Academic Senate for California Community College (1996) revealed the impact of accreditation and educational institutions and further reviewed on the increasing need of faculty participation in NAAC process.

• Commission on Higher Education Philadelphia, PA Middle State (1999) explored the process of higher education accreditation and programme accreditation.

• Dill, David D and others (2001) traced in their study that the accreditation help to restore public faith for self regulation by means of development of teaching, learning quality assessment.

• Faulkner, Jane B (2002) revealed in their study that many of the institutions have more interest to Balridge criteria for accreditation process.

• Arslan, Hasan (2002) explained that the Quality assessment by its rating and ranking would facilitate competition among higher education institutions.

• Yogindra Varma (2004) emphasized that the institution should be more quality conscious and takes quality enhancement efforts after accreditation.
2.05. STUDIES ON QUALITY ASSESSMENT AND ACCREDITATION MODELS

**MODEL - 1**

The Council on Education for Public Health is the independent agency officially organized to accredit graduate school pf public health. The following criteria and key aspects are practiced in their assessment:

**Quality Assessment Criteria and Key aspects**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Criteria</th>
<th>Key aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mission, Goals and Objectives</td>
<td>1.1. Concise Mission statement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2. Measurable objectives for each function</td>
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<tr>
<td></td>
<td></td>
<td>1.3. Description of attainment</td>
</tr>
<tr>
<td>2.</td>
<td>Organizational Setting External</td>
<td>2.1. Description of organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2. Organization chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.3. Satisfaction of criterion set</td>
</tr>
<tr>
<td>3.</td>
<td>Organizational Setting - Internal</td>
<td>3.1. Internal Structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2. Interdisciplinary co-operation,</td>
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<tr>
<td></td>
<td></td>
<td>co-ordination and collaboration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3. Policies on Institutional commitment</td>
</tr>
<tr>
<td>4.</td>
<td>Governance</td>
<td>4.1. Important committee and its structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.2. Faculty contribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.3. Performance assessment</td>
</tr>
<tr>
<td>5.</td>
<td>Resources</td>
<td>5.1. Availability of Human resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.2. Infrastructure and Learning resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.3. Identification of outcome measures</td>
</tr>
<tr>
<td>6.</td>
<td>Instructional Programmes</td>
<td>6.1. Publication of programmes and practice placements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.2. Evaluation of students progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.3. Measurement of Pass rate and Placement rate</td>
</tr>
</tbody>
</table>
| 7. | Research | 7.1. Policies and procedures of research  
7.2. Amount and sources of research fund  
7.3. Evaluation of research activities |
| 8. | Service | 8.1. Agreement with External agencies  
8.2. Nature and targets  
8.3. Students involvement in services |
| 9. | Faculty | 9.1. Policies on Recruitment and promotion  
9.2. Faculty development programmes  
9.3. Evaluation of process and competency |
| 10. | Students | 10.1. Admission and referral services  
10.2. Advising and counselling services  
10.3. Role of students in governance and functioning |
11.2. Measures to evaluate effectiveness  
11.3. Strength and weakness |

**MODEL - 2 European University Improvement Systems (2003)**

The European Quality University Improvement Systems model was designed to assess the quality of institution and programmes in Europe. It consists of ten domains for assessment and these are inter-related with special attention given to the relationship with the corporate world area and international dimension area.

**Quality Assessment Criteria and Key aspects**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Criteria</th>
<th>Key aspects</th>
</tr>
</thead>
</table>
1.2. Statutes and Governance  
1.3. Strategic positioning and objectives |
| 2. | Students | 2.1. Target Profile  
| | | 2.2. Selection procedure  
| | | 2.3. Course preparation and progression  
| | | 2.4. Career Placement and Support  
| 3. | Programme Quality | 3.1. Programme design, content  
| | | 3.2. Programme delivery  
| | | 3.3. Evaluation and Assessment  
| | | 3.4. Compatibility with other European systems  
| 4. | Personnal Development | 4.1. Development Process  
| | | 4.2. Personnal Effectiveness support  
| | | 4.3. Direct Skill application  
| 5. | Research and Development | 5.1. Research Activities  
| | | 5.2. Development  
| | | 6.2. Social and Economic contribution  
| | | 6.3. Extra-curricular activities  
| | | 6.4. Services to education  
| 7. | Faculty | 7.1. Size and composition  
| | | 7.2. Policy and Management  
| | | 7.3. Faculty Development and Education  
| | | 8.2. Premises and Equipment  
| | | 8.3. Library and Research facilities  
| | | 8.4. New Technology and Support services  
| | | 9.2. Evaluation of Impact of mission  
| | | 9.3. Past performance and forecasting projection  
| 10. | International Issues | 10.1. Position in International market  
| | | 10.2. Evaluate success of its objectives  
|
Middle State Commission on Higher Education, USA (2002)

Middle State Commission on Higher Education, USA, has documented the characteristic of Excellence 2002 in consonance with complex changes include federal and state regulation, performance based funding, issues of intellectual property and increased call for students learning.

Quality Assessment Criteria and Key aspects

A: INSTITUTIONAL CONTEXT

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Criteria</th>
<th>Key aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Planning, Resource allocation and Institutional Review</td>
<td>2.1. Focusing attention on mission and performance 2.2. Assign right resources and prioritize projects 2.3. Review of relevant qualitative and quantitative data</td>
</tr>
<tr>
<td>3.</td>
<td>Institutional Resources</td>
<td>3.1. Availability and utilization of resources 3.2. Rationale and consistent policies 3.3. Acquisition and equipments replacement process 3.4. Periodic assessment and utilization of resources</td>
</tr>
<tr>
<td>4.</td>
<td>Leadership and Governance</td>
<td>4.1. Involvement in policy development and decision making 4.2. Periodic assessment of effective function</td>
</tr>
</tbody>
</table>
### 5. Administration
4.3. Students representation on governance
5.1. Facilitate learning and Research activities
5.2. Foster quality improvement
5.3. Support institutions organization and Governance

### 6. Integrity
6.1. Address of students grievances
6.2. Fair and impartial
6.3. Honesty and trustworthy in students studies

### 7. Institutional Assessment
7.1. Review of policies
7.2. Review of promotion and tenure activities
7.3. Review of students guidance
7.4. Support of evaluation process

### B: EDUCATIONAL EFFECTIVENESS

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Criteria</th>
<th>Key aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Students Admission</td>
<td>8.1. Admission policy and criteria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.2. Academic flexibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.3. Congruence among recruitment, admission, retention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.4. Persistence and attrition data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.2. Advertisement procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.3. Students complaints</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.4. Assessment and improvement</td>
</tr>
<tr>
<td>10.</td>
<td>Faculty</td>
<td>10.1. Qualification to position</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.2. Advancement and development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.3. Linkage among teaching</td>
</tr>
</tbody>
</table>
| 11. | Educational Offering | 11.1. Periodic evaluation of curricular and co-curricular activities  
11.2. Learning resources, library and services  
11.3. Revision of course syllabi |
| 12. | Related Educational Activities | 12.1. Development of basic skills  
12.2. Experiential learning  
12.3. Non credit offering |
13.2. Persistence and Graduation rate  
13.3. Students goal attainment  
13.4. Alumni satisfaction and achievement  
13.5. Parity of outcomes across different students group |

**MODEL - 4**

**National Institution for Academic Degrees and University Evaluation - JAPAN**

In the year 1980, a decision was taken by the University Council by which the universities were required to undertake the processes of self-monitoring and self-evaluation, in order to maintain and improve the quality of education. Consequently, in the year 2000, a Directorate for University Evaluation was established at the National Institution for Academic Degrees (NIAD). NIAD defines the quality assurance programme, as an autonomous task, for all higher education institutions.
<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Criteria</th>
<th>Key aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mission of the University</td>
<td>1.1. Consistent with general objectives&lt;br&gt;1.2. Recognised by members&lt;br&gt;1.3. Made known to public</td>
</tr>
<tr>
<td>2.</td>
<td>Organization for Education and Research</td>
<td>2.1. Appropriate Structure&lt;br&gt;2.2. Ensuring Implementations</td>
</tr>
<tr>
<td>3.</td>
<td>Faculty, Staff and Educational Assistant</td>
<td>3.1. Appropriate numbers with quality&lt;br&gt;3.2. Standards for Recruitment and promotion&lt;br&gt;3.3. Research accomplishing educational activities</td>
</tr>
<tr>
<td>4.</td>
<td>Students admission</td>
<td>4.1. Admission policy&lt;br&gt;4.2. Number of fitting students&lt;br&gt;4.3. Policy dissemination and its acceptance</td>
</tr>
<tr>
<td>5.</td>
<td>Curriculum and method of education</td>
<td>5.1. Systematic organization of programmes&lt;br&gt;5.2. Appropriate teaching, learning and instruction&lt;br&gt;5.3. Efficient tutoring activities&lt;br&gt;5.4. Appropriate grading system</td>
</tr>
<tr>
<td>6.</td>
<td>Achievement of Education</td>
<td>6.1. Attainment of academic abilities on part with purpose</td>
</tr>
<tr>
<td>7.</td>
<td>Students services</td>
<td>7.1. Course guidance&lt;br&gt;7.2. Counseling and advisory system&lt;br&gt;7.3. Environment for Auto learning&lt;br&gt;7.4. Assistance on securing job and financing</td>
</tr>
<tr>
<td>8.</td>
<td>Facilities and equipment</td>
<td>8.1. Effective maintenance and utilization&lt;br&gt;8.2. Accommodate to educational offerings</td>
</tr>
</tbody>
</table>
### Balridge Education Criteria for Performance Excellence Framework

Malcolm Balridge National Quality Award is the highest award for performance excellence managed by the National Institute of Standards and Technology. In order to promote quality awareness and recognize quality achievements, the congress established this award in the year 1987. A brief description of the categories is as follows:

**Leadership**: It examines how an organization's senior leaders guide and sustain the organization. The way an organization's governance addresses the ethical, legal, and public responsibilities is also examined.

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3.</td>
<td>Arrangement of books, journals, audio visual materials and others</td>
</tr>
<tr>
<td>9.1.</td>
<td>Evaluate and improve operational efficiency</td>
</tr>
<tr>
<td>9.2.</td>
<td>Training programme to improve quality of teachers, others</td>
</tr>
<tr>
<td>10.1.</td>
<td>Appropriate financing foundation</td>
</tr>
<tr>
<td>10.2.</td>
<td>Planning for Revenue and expenditure</td>
</tr>
<tr>
<td>10.3.</td>
<td>Proper evaluation of financial matters</td>
</tr>
<tr>
<td>11.1.</td>
<td>Management system and administrative structure</td>
</tr>
<tr>
<td>11.2.</td>
<td>Established Management policy</td>
</tr>
<tr>
<td>11.3.</td>
<td>Responsibility and Authority</td>
</tr>
<tr>
<td>11.4.</td>
<td>Self monitoring and Evaluation</td>
</tr>
<tr>
<td>12.1.</td>
<td>Effective system appropriate to mission statement</td>
</tr>
<tr>
<td>12.2.</td>
<td>Implementation of Research activities</td>
</tr>
</tbody>
</table>

**MODEL - 5**
**Strategic Planning** : This category examines the strategic objectives and action plans. It also analyses how strategic objectives and action plans are deployed, changed and progress is measured.

**Student, Stakeholder and Market focus** : It examines how an organization determines the requirements, expectations, and preferences of students, stakeholders, and markets. Factors that attract students and lead to student and stakeholders satisfaction and loyalty are also examined.

**Measurement, analysis and Knowledge management** : It examines how an organization selects, gathers, analyses and improves its data, information and knowledge assets. It further examines how the organization review organizational performance.

**Workforce focus** : It examines an organization’s ability to organize, manage and develop workforce to utilize their full potential and also assess workforce capabilities and capacity to build an environment for high performance.

**Process Management** : It focuses on an organization’s core competencies and work systems, and examines how it designs, manages and improves its key processes to achieve organizational success and sustainability and also examine the readiness to face emergency situations.

**Results** : In this category the results of organization’s performance are to be examined in all above six categories and improvements in key areas – student learning, budgetary provisions, faculty and staff results, leadership.
## Quality Assessment Criteria and Key aspects

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Criteria</th>
<th>Key aspects</th>
<th>Scores</th>
</tr>
</thead>
</table>
| 1.    | Leadership                                    | 1.1. Senior Leadership  
1.2. Governance and Social Responsibility | 70  
50 |
| 2.    | Strategic Planning                            | 2.1. Strategy Development  
2.2. Strategy Deployment            | 40  
45 |
| 3.    | Students, stakeholder and market focus        | 3.1. Student, stakeholder,  
and Market knowledge  
3.2. Student and Stakeholder Relationship and Satisfaction | 40  
45 |
4.2. Information and Knowledge Management | 45  
45 |
| 5.    | Workforce focus                               | 5.1. Workforce Engagement  
5.2. Workforce Environment          | 45  
40 |
6.2. Work Process Management and Improvement | 35  
50 |
| 7.    | Results                                       | 7.1. Student Learning Outcomes  
7.2. Student and Stakeholder Focused Outcomes  
7.3. Budgetary, Financial and Market Outcomes  
7.4. Workforce-focused Outcomes  
7.5. Process Effectiveness Outcomes  
7.6. Leadership Outcomes | 100  
70  
70  
70  
70  
70 |

150
In the process of developing new self-assessment model, Abdul Rasuf, Professor of Higher Education, and Chairman of Quality assessment commission, Pakistan, has developed a model in 2005 to assess the quality of Higher Education Institutions with the following criteria and key aspects.

**Quality Assessment Criteria and Key aspects**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Criteria</th>
<th>Key aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1.2. Statutes and governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3. Strategic objectives</td>
</tr>
<tr>
<td>2.</td>
<td>Student</td>
<td>2.1. Criterion for Selection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2. Course Preparation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.3. Progression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4. Career Placement and Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5. Student services</td>
</tr>
<tr>
<td>3.</td>
<td>Quality of Programmes</td>
<td>3.1. Program design, content and delivery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2. Program evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3. Compatibility with similar program offered at other universities</td>
</tr>
<tr>
<td>4.</td>
<td>Personnel Development</td>
<td>4.1. Personal effectiveness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.2. Direct application of skills</td>
</tr>
<tr>
<td>5.</td>
<td>Contribution to the Community</td>
<td>5.1. Social and economic contribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.2. Extra curricular activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.3. Services to education</td>
</tr>
</tbody>
</table>
| 6.   | Research and Development | 6.1. Research activities  
6.2. Innovation |
| 7.   | Faculty                  | 7.1. Faculty size and composition  
7.2. Faculty policy and Management  
7.3. Faculty development |
8.2. Premises and equipment  
8.3. Library facilities  
8.4. Computing facilities  
8.5. General Support facilities |
9.2. Impact on development of institutions and its programmes  
9.3. Effectiveness of links between University and the employer |
| 10.  | Links with other Universities | 10.1. Policy for adding a successful Linkages  
10.2. Policy on partnership with other Institutions |

**ISO 9001 – 2000**

ISO is the International Organization for Standardization. They contribute to making the development, manufacturing and supply of products and services more efficient. The ISO 9000 standards were originally conceived for companies in the manufacturing industry to predict the reliability of the products and quality control. ISO 9000 is a common label that consists of ISO 9001, ISO 9002, ISO 9003, ISO 9004 and their subsets. ISO 9001 and 9002 are quality system standards that allow certification by a third party.
ISO 9001:2000 for educational institutions has 21 elements in four major sections: Management responsibility, resource management, product realization and measurement, analysis and improvement. The ISO 9001 and 9002 standards are meant for compliance that can be certified by an independent third party (an accreditation body approved by IIS). Organizations interested in getting the certification contact a certification body and prove their compliance over a period of 6 – 8 months to the satisfaction of the agency s per the standards.

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<thead>
<tr>
<th>Sl.No.</th>
<th>Section</th>
<th>Element</th>
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<tbody>
<tr>
<td>1.</td>
<td>Management responsibility</td>
<td>1.1. Management commitment in the educational organization</td>
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<td></td>
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<td>1.2. Customer focus in the educational organization</td>
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<td></td>
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<td>1.3. Quality policy in the educational organization</td>
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<tr>
<td></td>
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<td>1.4. Planning</td>
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<td></td>
<td></td>
<td>1.5. Responsibility, authority and communication</td>
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<tr>
<td></td>
<td></td>
<td>1.6. Management review in education sector</td>
</tr>
<tr>
<td>2.</td>
<td>Resource Management</td>
<td>2.1. Provision of resources in the educational organization</td>
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<td></td>
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<td>2.2. Human resources in the educational organization</td>
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<td>2.3. Infrastructure in the educational organization</td>
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<td></td>
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<td>2.4. Work environment in the educational organization</td>
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<tr>
<td>3.</td>
<td>Product realization</td>
<td>3.1. Planning of product realization in the educational organization</td>
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<td></td>
<td></td>
<td>3.2. Customer-related processes</td>
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<td></td>
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<td>3.3. Design and/or development</td>
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<td></td>
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<td>3.4. Purchasing</td>
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<td></td>
<td></td>
<td>3.5. Production and service operation</td>
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<td></td>
<td></td>
<td>3.6. Control of motivating and measuring devices in the educational organization</td>
</tr>
</tbody>
</table>
4. Measurement, analysis and improvement

4.1. General guidance in the educational organization
4.2. Monitoring and measurement
4.3. Control of nonconformity products in the educational organization
4.4. Analysis of data in the educational organization
4.5. Improvement

* This has not been taken into consideration for tool construction.

**MODEL - 7 National Board of Accreditation (NBA), India**

The National Board of Accreditation was constituted by the All India Council for Technical Education (AICTE) with the aim to accredit all diploma, undergraduate and postgraduate programmes coming under Engineering and Technology, Management, Architecture, Pharmacy, Hotel Management and catering technology. In this accreditation, focuses on programme evaluation and not on institutional evaluation as in the case of NAAC.

**Quality Assessment Dimension and Key aspects**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Dimension</th>
<th>Key aspects</th>
<th>Weightage</th>
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<tr>
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<td>UG</td>
</tr>
<tr>
<td>1.</td>
<td>Organization and Governance</td>
<td>1.1. Planning and Monitoring</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2. Recruitment procedure and its effectiveness</td>
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<td></td>
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<td>1.3. Promotional policies / procedures</td>
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<td>1.4. Leadership</td>
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<td></td>
<td></td>
<td>1.5. Motivational initiatives</td>
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<td></td>
<td></td>
<td>1.6. Transparency</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.7. Decentralization, Delegation</td>
<td>50</td>
</tr>
<tr>
<td>2.</td>
<td>Financial resources, allocation and Utilization</td>
<td>2.1. Budget allotted to the institution and utilization Recurring budget Non recurring budget</td>
<td>70</td>
</tr>
<tr>
<td>2.2. Budget allocated in the Department and utilization Recurring budget Non recurring budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Physical resources and central facilities</td>
<td>3.1. Students Hostel (Men and Women)</td>
<td></td>
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<tr>
<td>3.2. Power back up: Instn/Dept/Hostels</td>
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<tr>
<td>3.3. Reprographic facilities</td>
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<tr>
<td>3.4. Bank, Post office</td>
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<tr>
<td>3.5. Counseling and guidance, language lab, medical facility</td>
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<td>3.6. Internet facility</td>
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<tr>
<td>3.7. Canteen and Transport</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>4.1.</td>
<td>Human resources (Faculty and Staff)</td>
<td>4.1.1. Faculty (Number, students-faculty ratio, cadre ratio, average experience, faculty retention, turnover</td>
<td>200</td>
</tr>
<tr>
<td>4.1.2. Service rules, pay package, incentives</td>
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<tr>
<td>4.1.3. Participation of faculty in Institutional development / Departmental development / Academic matters / student development / self growth</td>
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<tr>
<td>4.1.4. Implementation and impact of faculty development initiatives</td>
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<tr>
<td>4.1.5. Analysis and follow up of Performance appraisal</td>
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<tr>
<td>4.1.6. Support staff (technical / administration) – Number, Qualification / skills (lab, office, computer centre, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 4.2. | Human Resources - Students | 4.2.1. Students admission  
4.2.2. Academic results  
4.2.3. Performance in competitive examinations  
4.2.4. Placement | 100  
100 |
| 5. | Teaching-Learning Resources | 5.1. Delivery of syllabus, contents beyond the syllabus  
5.2. Academic calendar continuation equation procedures  
5.3. Utilization of laboratories / equipment  
5.4. Information access facilities  
5.5. Students and centric learning initiatives  
5.6. Students feedback | 350  
250 |
6.2. Academic / Sponsored / Industrial  
6.3. Publication and Patents  
6.4. Industry participation in development and were related activities | 100  
250 |
| 7. | Supplementary Progress | 7.1. Extra and Co-curricular activities  
7.2. Personality Development initiatives  
7.3. Professional society activities  
7.4. Alumni Interaction  
7.5. Students Publications / Awards | 50  
50 |
National Assessment and Accreditation Council (NAAC), India

National Assessment and Accreditation Council (NAAC) has been established in the year 1994 to ensure and enhance quality in Higher Education Institutions. The criteria, key aspects and weightage on each key aspect are furnished below:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Dimension</th>
<th>Key aspects</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Curricular Aspects</td>
<td>1.1. Curricular design and development</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2. Academic flexibility</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3. Feedback on curriculum</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4. Curriculum update</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.5. Best practices in curriculum aspects</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>150</td>
</tr>
<tr>
<td>2.</td>
<td>Teaching, Learning and Evaluation</td>
<td>2.1. Admission process and students profile</td>
<td>20</td>
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<tr>
<td></td>
<td></td>
<td>2.2. Catering to diverse needs</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.3. Teaching learning process</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4. Teacher quality</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5. Evaluation process and reforms</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.6. Best practices in Teaching, Learning and Evaluation</td>
<td>10</td>
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<tr>
<td></td>
<td></td>
<td>Total</td>
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<tr>
<td>3.</td>
<td>Research, Consultancy and Extension</td>
<td>3.1. Promotion to Research</td>
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<tr>
<td></td>
<td></td>
<td>3.2. Research and publication output</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3. Consultancy</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.4. Extension activities</td>
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<tr>
<td></td>
<td></td>
<td>3.5. Collaboration</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.6. Best practices in Research, Consultancy and Extension</td>
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<tr>
<td></td>
<td></td>
<td>Total</td>
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<td>Infrastructure and Learning resources</td>
<td>4.1. Physical facilities for learning</td>
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<td></td>
<td>4.2. Maintenance of infrastructure</td>
<td>10</td>
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<td></td>
<td>4.3. Library as a learning resources</td>
<td>10</td>
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<td></td>
<td>4.4. ICT as learning resources</td>
<td>35</td>
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<td></td>
<td>4.5. Other facilities</td>
<td>10</td>
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<td></td>
<td>4.6. Best practices in the development of infrastructure and learning resources</td>
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<tr>
<td></td>
<td>Students Support Progression</td>
<td>5.1. Students progress</td>
<td>30</td>
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<td></td>
<td>5.2. Student support</td>
<td>30</td>
<td></td>
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<td></td>
<td>5.3. Student activities</td>
<td>30</td>
<td></td>
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<tr>
<td></td>
<td>5.4. Best practices in student support and progression</td>
<td>10</td>
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<tr>
<td></td>
<td>Governance and Leadership</td>
<td>6.1. Institutional vision and leadership</td>
<td>15</td>
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<td></td>
<td>6.2. Organizational arrangements</td>
<td>20</td>
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<tr>
<td></td>
<td>6.3. Strategy development and deployment</td>
<td>30</td>
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<td></td>
<td>6.4. Human resource mgt. and resource mobilization</td>
<td>40</td>
<td></td>
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<td></td>
<td>6.5. Best practices in Governance and Leadership</td>
<td>35</td>
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<tr>
<td></td>
<td>Innovative Practices</td>
<td>7.1. Internal quality Assurance system</td>
<td>20</td>
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<td></td>
<td>7.2. Inclusive practices</td>
<td>15</td>
<td></td>
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<td></td>
<td>7.3. Stakeholder relationships</td>
<td>15</td>
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2.06. STUDIES ON REVISITING ON ASSESSMENT MODELS

Pillai K.N.M. Srinivas, G (2006) conducted a study on "A study of the Post accreditation Scenario in the North Eastern Region of India : a meta evaluation of the National Assessment and Accreditation Council processes and procedures" The Indian higher education system is one of the largest of its kind in the world. In spite of several built in quality controls, such as the University Grants Commission's guidelines and the affiliating functions of the university, deterioration in the quality of higher education was a serious concern for all stakeholders. In 1994 India established the NAAC to ensure and enhance the quality of Indian higher education and also to play an international role as a quality assurance agency. The NAAC has been able to make its assessment and accreditation process acceptable to the institutions and academia through an intensive awareness campaign and academic interactions involving various universities, colleges, state higher education councils and other academic forums. However, it is equally important to begin continuous feedback from the beneficiaries in the field to determine the effectiveness and enhance the efficiency of the organization. The present study showed that in the 10 years of its existence the NAAC has earned a lot of goodwill and appreciation from the academic community. Simultaneously, it also suggested a need for incessant effort on the part of the NAAC to strengthen and fine-tune its processes and procedures.

Gnanam A. and Antony Stella (2006) in their research study on "Revisiting the Quality Assurance model of the NAAC – understanding it in the right perspective" revealed that the following are the concerns and comments from the educationalists on the adoption of certain practices by National Assessment Accreditation Council:
• NAAC's process heavily depends on inputs and to make the assessment outcome more objective, an outcome-based approach should be considered

• The assessment exercise focuses more on form than on substance

• The current assessment criteria are disproportionately oriented towards institutional and management than educational aspects

• The assessment protocols follow an aggregate approach, which conceals more than it reveals

• The assessment should present the department wise grading also

• The public standing of an institution is ignored in the process

• The assessment exercise does not focus on the substantive aspects of education like quality of curriculum content

• The instrument rely more on the subjective appraisal of insiders than on the objective appraisal of outsiders

• The process focuses more on the cognitive than on the social aspects of education

• The indicators of quality applied by the NAAC are probably not derived from an informed vision of education

• The assessment outcomes are not linked properly to any direct incentives

Prasad V. (2005) presented a paper entitled "quality assurance policy for Higher education developing country perspective" at the International Quality Assurance conference held at Australia. The author explained that the important concern on quality assurance in higher education at present is reliability of grading and relevance of Peer Team report and further insisted that simple and quantifiable criteria of quality assessment will bring more credibility to the operation.
Cook, Roger, Butcher, Isabella, Raeside, Robert (2006) in this study on "Recounting the Scores: an analysis of the QAA subject review grades 1995 – 2001" explained that the grades awarded in the subject level review process practiced in England between 1995 and 2001 are examined. These grades have subsequently been sued to sustain most published league tables and are often cited in debates about institutional quality. However, the grades were never subject to any moderation, either at the time of the individual visit or subsequently. Accordingly, there are substantial variations between subjects and marked grade inflation over time. This study considered how to control these effects, and once this is done, what the impact on the published league tables would be. The difference between the adjusted and unadjusted scores are significant and this further calls into doubt both the validity of the original process and the uses to which the output have been subsequently been out. This serves as a warning to other quality assurance agencies who have used or are considering using audits based on subject reviewed.

Manjunath (2006) in his study on 'Whither Accreditation' reviews NAAC assessment and concludes that it is structure-based. He also adds that the structure can continue to be refined. After a period of time, a well-defined format may be arrived to enable the institution to do a self-study and prepare a Self Study Report to be submitted to NAAC.

The accreditation outcome of NAAC is presented as a report and a grade. The report is supposed to provide a detailed account of the Institution's functioning in both academic and administrative aspects. This is made possible by writing the report according to the criteria of NAAC, which encompass total institutional context. The report also needs to bring out the salient aspects of functioning of departments, though not by way of
a comparative account, the commendations and recommendations are listed in the report under the overall analysis. The former are supposed to highlight achievements, academic or otherwise, and the latter, that are to be institution-specific and arrived at from the inputs gathered during the course of the visit, need to guide the institution on the measures it may adopt for overall betterment.

Some of the issues that are often debated in related circles including in-house are grading system, transparent and proper choice of assessors, ways to minimize inter-team variations, ways to popularize use of accreditation outcome by stakeholders and ways to make post-accreditation follow-up effective.

The study concluded that across the world, accreditation has come to rank high on the political agenda. Whereas before 1999, not one country in Western Europe used the term accreditation, these days accreditation is subject of discussions in many countries. The examples of US and UK are well known i.e. the regional bodies such as Asia Pacific Quality Network have given a fillip to development of incipient systems in their member countries. Accreditation means to preserve and promote common good has come to stay.

Davenport, Cynthia, A (2001) explained on “How frequently should Accreditation standards change?” The study revealed that the research conducted have reviewed more than 20 accreditation policies to explore how often standards should change. It was suggested that the standards should change often enough to be responsive to members of the accrediting body, but not so often as to be burdensome or intrusive.
Mariamma A Varshese (2005) conducted a study on "Quality gap in Higher education". She revealed that the most important challenge is not just to guarantee the expansion of education, but to improve the quality and link education to society's needs and development goals. It is necessary that the road map of the future higher education scenario be chartered clearly to facilitate the transition of India in a developed nation and the strongest nation in the Asian Continent over the next fifty years. NAAC has so far accredited over 2608 institutions including 122 Universities and University level institutions. However the spread of the accredited institutions spans a wide range in geographical territories indicating among other things the variation in response levels to the need for quality assurance. In the North and South regions there are fairly large number of highly rated institutions i.e. 37.1% and 43.2% respectively and the rest of them belong to the middle level category. In the Western region, 25% of the institutions are highly rated and large number in the middle and few in the low category.

In this study she found some quality gaps. Some are policy gaps and others are institution specific quality gaps according to the criteria used by NAAC for assessment. In general, the quality gap shows much variation with respect to research, consultancy extension, infrastructure and learning resources, student support and progression and organization and management. The quality gap with the benchmarks in these criteria is also seen wider for most of the institutions. Policy level gaps are in terms of funding, appointment of adequate staff, provision for autonomous colleges and Internet connectivity for institutions and freedom for making decisions. The quality of higher education should encompass four components: Existence of infrastructure, human and learning resources, Extent of use, Effectiveness of the management process and Effect of the
inputs and processes. The three main points which bring down the quality of higher education in university system according to him are the democratization of the governing bodies of universities, trade unionisms among teachers and the administrative staff and the personnel promotion scheme. The quality gaps were identified in all the seven criterion of NAAC's assessment. Institutions should innovate practices, which will continuously upgrade the quality of higher education. The failure of our higher education systems to produce sufficient number of good teachers need to be looked into seriously.

The study concluded that education should focus on a blend of knowledge and multiple skills. It should simultaneously be accompanied by the development of new and functional markets for such expertise and skills. Winds of globalization are blowing across the country and beginning to unleash new forces in all sectors. The sectors where higher education is lagging behind need intensive intervention for quality enhancement in the areas where quality gap are identified. Systemic efforts in preparing the action plans and implementing the same will enable the attainment of our goals in higher education.

**Sharma S.L. (2004)** in his study on “Rethinking Quality parameters in Higher education” analyzed the quality parameters used by NAAC. The purpose of this piece is not to undermine the valuable contribution of NAAC towards quality enhancement but to reflect on its quality criterion with a view to refining and enriching the same. In pursuit of this end, five points arguments are posed for study:

(i) NAAC criteria of assessment of educational institutions accord more weightage to institutional than to educational context. (ii) it follows an aggregative approach which conceals more than it reveals (iii) its criteria
suffer from a significant omission in that they take no cognizance of the academic standing of the institution concerned in the perception of the educational community around (iv) the indicators that are devised to measure quality of education tend to focus more on the form than on the substance of education, more on the subjective appraisal of the insiders than on the objective appraisal of the outsiders and more on the cognitive than on the social dimension of education (v) the indicators seem to be derived more from an ad hoc view than a well thought out vision of quality education.

As the first points endorsed with the fact that among the seven criterion adopted, first three relate to educational quality and last four pertain to institutional support structure. In the weightage, first three has been given weightage of 55 per cent whereas 45 percentage weight to last four. It is argued that with this kind of weightage structure a resource-rich educational institution with poor performance on educational dimension may get higher score, and thus pass for a better educational institution than the one which is resource poor with higher score on educational dimension. In the second study the quality of an educational institution should be assessed primarily in terms of quality of education and only secondarily in terms of quality of institutional inputs. Quality of education and that of an educational institution are two different things and the two need to be treated separately. The assessment and accreditation should be initiated within the departments. Third concern endorsed the aspect of NAAC parameters is the weightage to the academic standing of the educational institution in the public eye. This omission is crucial for two reasons: (i) because it may lead to bracketing of two institutions of unequal standing at par (ii) because it may lead to disparity between the NAAC rating and the public rating of the same institution. Fourthly, a look
at the NAAC indicators reveals that they focus more on the structural and formal aspects of educational inputs, processes and outcomes than on the substantive aspects. It was decided in overall that the NAAC indicators on the various criteria pertaining to the educational process are more of quantitative order than qualitative, they seem to be concerned more with the formal requisites than with substantive, more with the provision of facilities than with the quality of their utilization and more with the quality of infrastructure and financial inputs than with the quality of educational processes and their outputs.

The study concluded with the findings that NAAC indicators are probably not derived from an informed vision of education. At any rate, even if it is conceded that they are derived from such a vision, the same is not stated. It will help put the indicators of quality education in perspective if the vision is stated in advance. It is also added that steps may be taken to complement self study report submitted by an institution with a little more rigorous reality check on the claims made by an institution. This would enhance the credibility of NAAC in the eyes of the academic community as also of corporate and public organizations.

2.06.1. OVERVIEW OF THE STUDIES ON REVISITING ON ASSESSMENT MODELS

- Pillai K.N.M. Srinivas (2006) in their study highlighted that the existing assessment practices requires incessant effort to strengthen and fine-tune its processes and procedures.

- Gnanam A. and Antony Stella (2006) revealed in their report that many concerns and comments are necessitated to revise the standards, indicators practiced at present by NAAC.
• Prasad V.S. (2005) explained in his study that important concern on quality assurance of higher education is reliability of grading and relevance of Peer Team report.

• Cook, Roger, Butcher, Raeside, Robert (2006) in their study on Reconsideration of scoring of assessment warns the quality assurance agencies to avoid confusion on output measurements.

• Devenport, Cynthia A (2001) in their study identify the standards to be changed in response to the members of accrediting body.

• Mariamma A Vargheese (2005) in her study on the quality gap identified in the criterion of NAAC's assessment insist on taking intensive intervention to enable the attainment.

• Sharma S.L. (2004) in his study on Rethinking Quality Parameters in Higher Education revealed the need to revisit the assessment indicators.
2.07. SYNTHESIS OF STUDIES

The review focused on studies that had attempted on the study of quality, quality movement in Higher Education, Accreditation, various dimensions of quality assessment of Higher education institutions and revisiting the assessment model in India.

Meaning and approaches of the term quality was examined and reported by Bureau of Indian Standards (1988) and Green and Harvey (1993). Deep commitment, continuous attention and fair reward among the stakeholders that ensure total quality management were revealed by Patil (2002), McLagan, Particia (1991), Naudean (1992) and Mathews (1993). Further, the implication of Total Quality Management in Higher education movement was examined by Mathews (1993) and Lenenberger John A. Whitaker Sheldon V (1991) and the imperative need on concentration of its efforts and energies on constant monitoring, control and incentives were also dealt by Powar (1998).

The evaluation of overall performance of an educational institution under internal and external forces were undertaken by an assessment. Sunanda Uday Chande (2004), Freed Jann E and others (1997) Prasad V.S. (2005), Madhusudanan Pillai K.N. (2006) have reviewed and reported the performance indicators and Assessment dimension of higher education institutions. Importance of offering socially relevant programmes, revision and restructuring of programmes were examined by Prasad V.S. (2005), Calder (1999), Hauderick (1992), NAAC publication (2004). The role of visionary leaders and quality in administration were also reported by Evan G.R. (2000), Stanley; Elizebeth, C. Patrick, Williams J (1997) as the quality indicators in assessment.
Number of research studies revealed that quality teaching and research are the imperative elements on assessment. The studies of Bastick, Tony (1999), Gupta S.K. (1990), Poliakoff, Anne, Rogers (2002) reported that the teachers quality to be linked with students achievement and their professional competency and enrichment of their research skills. The impact of faculty development programmes are also reviewed and presented by Maheswari L.K. and Motilal Dash (2006). Falling on line, Bowden John, Marson, Ference (1988), Tripathi R.S. (1991), Stweard, Robert Grisham examined the relevance of learning outcome with teaching quality and employment of its products with teaching ability.


Even though number of pertinent and significant dimensions / stakeholders are vital for effective functioning, a wholistic assessment would be fulfilled only when there is an integration among the course relevance, research strength, improvement in physical facilities and employment of its products [Buamk, Berylda, Hedl – pedl (1989) and Benal B.L. (1998)].
Assessment of an educational institution is also accompanied by Accreditation since both work in tandem. Accreditation is a process of assessing and enhancing academic and educational quality through voluntary peer review (Costello, Daniel E (1996) and Dill David D and others (2001). The accreditation outcome are revealed in ranking and rating which sometimes facilitate displeasure or competition among higher education institutions [Commission on Higher education Philadelphia P.A. middle state (1999), Arslan Hasan (2002) and Madukar B.S. Lathapillai (2006)].

In India, National Assessment and Accreditation council (NAAC) is functioning as a statutory agency for assessment and Accreditation of higher educational institutions. NAAC has evolved the seven criteria in the year of 1996 for quality assessment with different scoring pattern on each criteria separately for Universities, Affiliated colleges and Autonomous colleges (NAAC publications, Bangalore). As a result of continuous state wise analysis of Accreditation reports and Accreditation outcome – emerging issues for Policy Planning and Systemic Action, the need for revisiting the assessment indicators has emerged. Besides the continuous feedback in the form of concern and comments from academicians and beneficiaries, the revision of standards, fine-tuning of indicators and change of grading pattern are examined and reported by Pillai K.N.M. Srinivas G. (2006), Gnamam A and Antony Stella (2006), Madhukar B.S. Latha Pillai (2005). The resources made and review reported in the research studies revealed that there is some quality gap in Higher education (Mariamma Varghes 2005)) and need for revisiting the quality assurance model of the NAAC. Many comments and concerns on the proposed model are on the need for fine-tuning of indicators and minimize the scope for subjectivity in Peer Team Assessment. The significant
number of appeals made against NAAC gradation is reported to ‘Appeals committee’ constituted by NAAC.

2.08. CONCLUSION

In this chapter, the researcher had reviewed the research works on Quality dimensions, Quality in Higher Education and Quality Assessment and Accreditation of Higher Education Institutions in various countries. In most of the countries like USA, UK, Japan, Australia including India has got National level official agencies to assess the Quality of Higher Education. The research studies mostly deal with the existing pattern of assessment and emphasize the need for the correct assessment tools.

But the problem of designing an accurate assessment tool remains a challenge. Each country is making its own effort to introduce New dimensions and accuracy in the assessment tool. In India, NAAC has developed a Quality Assessment pattern. But it has certain items, which are susceptible to subjective assessment. This problem is aptly studied by Sharma S.L. (2004) on “Rethinking Quality Parameters in Higher Education”. As refining and enriching the assessment of Higher Education assessment pattern remains as a research gap, the researcher has chosen “Quality Assessment and Accreditation of Higher Education Institutions – An empirical Model” as a topic for his research study. Having chosen the topic for study, the researcher proceeds to draw a suitable research design to probe in detail the various assessment indicators, scoring pattern and procedures to evolve New Assessment Model in the following chapters.