Higher education is the center of society. India's Higher Education Program is one of the most comprehensive programs in the world. India's Higher Education Program has been expanded during the national independence of several universities, technicians, research centers, etc. throughout the country to produce and disseminate information that is aimed at providing the easiest access to higher education in indigenous Indians. New challenges facing the education system in this country cannot be met without the complete completion of the institution of management of higher education institutions. This is even more important because of globalization, which requires talent, ability, driving, action and comforts at several levels. If the management of higher education will be strong one then quality can be maintained in that level, so National Academic Accreditation Council (NAAC) has been formed for quality assurance in higher education. The present paper is based on the quality in higher education with reference to the role of NAAC. In this paper the core values of NAAC are emphasized with regards higher education in India. Along with that the quality dimensions of higher education has been narrated with reference to product, software and service dimensions as a whole. Finally, some quality assessment tools are being mentioned to assure quality in higher education institutions by NAAC.

Keywords: Higher Education, Concept of Quality, Core Value of NAAC, Quality dimensions, Quality assessment.

Introduction

Higher education provides deep knowledge and understanding in order to develop learners in new borders of knowledge in different ways of life. It enables the student's ability to ask and seek the truth and to analyze current issues. It enhances the individual's intellectual capacity within a small technology and provides a broader view of the world around it. Higher education is often understood by combining teaching, research and expansion. However, exporting to higher education has contributed to the need for accountability and transparency while facing global education challenges. By 2025, the projected demand for higher education could reach 263 million students. As the demand for quality education increases, there is a growing demand for quality assurance for international universities where there is increased mobility of students, faculty, programmes and higher education institutions in global context. Quality assurance can be a driver for higher education institutions to achieve excellence in higher education. However, ensuring that the quality of educational programmes meets local and international standards simultaneously has become a great challenge in many countries, hence, a need emerges for co-operation of quality assurance agencies and acceptance of quality assurance in higher education, so a common framework for quality assurance model may be helpful for this.

Role of Higher Education

If the concept of higher education will be critically analysed then it can be found that higher education plays vital role in the society. It is the source or feeder system in all walks of life and therefore supplies the much-needed human resources in management, planning, design teaching and research. Most truly speaking, the development of indigenous technology and capabilities in agriculture, food security and other industrial areas are possible because of our world class higher education.
infrastructure. Higher education also provides opportunity for lifelong learning. The Kothari Commission (1964-1966) listed down the following roles of higher education for the society:

- To provide right kind of leadership
- To identify gifted youth and help them develop their potential to the fullest extent by cultivating physical fitness, developing powers of the mind and cultivating right interests, attitudes, moral and intellectual values.
- To seek and cultivate new knowledge and to engage vigorously and fearlessly in the pursuit of truth, and to interpret old knowledge and beliefs in the light of new needs and discoveries.
- To provide the society with competent men and women trained in agriculture, arts, medicine, science and technology and various professions.

The report of the UNESCO International Commission on Education in the 21st Century entitled “Learning The Treasure Within” emphasized four pillars of education; learning to know, learning to do, learning to live together and learning to be, while, higher education intends to inculcate all these four in individuals and the society. So, higher education is to be quality based, so that each and every stakeholder will be satisfied.

Quality in Higher Education

The word ‘quality’ comes from a Latin term ‘qualis’ which means ‘what kind of’. The British Standard Institution (BSI) defines quality as “the totality of features and characteristics of a product or service that bear on its ability to satisfy stated needs”. Quality has been defined in different context. Edward Deming defines quality as satisfaction of the customer’s needs and expectations which are changing over time and space. Crosby defines quality as ‘zero defects’ or ‘free’. Joseph Juran defines quality as ‘fitness for purpose.’ So, it can be said that quality is a much used and least understood term. In this way, quality can be defined as ‘zero defect’ or ‘fitness for purpose’. But quality in higher education means the educational process is such that it ensures students achieve their goals and thereby satisfies the needs of the society and help in national development (Mukhopadhaya, 2015).

The University Grant Commission (UGC) with its statutory powers is expected to maintain quality in Indian higher education institutions. Section 12 of UGC Act requires UGC to be responsible for the determination and maintenance of standards of teaching, examinations and research in universities. The Programme of Action 1992 states that as a part of responsibility for the maintenance and promotion of standards of education, the UGC will begin with, take the initiative to establish an Accreditation and Assessment Council as an autonomous body (Ryan, 2015).

Core Values of NAAC

The Indian Higher Education Program is constantly changing and moving due to growing needs to maximize access to higher education, the impact of technology in providing education, increasing the role of the private sector and the impact of co-operation of the country. Taking these developments and the role of higher education in the community, NAAC has developed five core values, which are as follows;

a) Contributing to national development: Most of the Higher Education Institutions (HEIs) have a remarkable capacity to adapt to change. Contributing to national development has always been a goal of Indian HEIs, explicitly or implicitly. HEI plays an important part in bringing reforms that benefit the country and can help to make national development.

b) Fostering global competencies among students: The development in the global scenario make it imperative for the NAAC to include in its scope of assessment the development of skills of Indian scholars such that their skills are as par with those of their counterparts abroad. While increasing access to higher education and ensuring social justice will continue to be important objectives of
national development. As increasing access to higher education and ensuring social justice will continue to be the key objectives for the development of the country. Therefore, the HEIs should prepare students with global competencies to successfully face the changing global scenario.

c) **Inculcating a value system in students:** HEIs have the responsibility of inculcating a desirable value system in students. In a country like India with cultural pluralities and diversities, it is essential that students imbibe values commensurate with social, cultural, economic and environmental realities at the local, national and universal level.

d) **Promoting the use of technology:** Most of the significant developments that one can observe today can be attributed to science and technology. While the advantages of using modern tools in day-to-day life are well recognized, the use of technology in our way of learning and administering leaves much to be desired. The degree of use of technological innovations in educational transactions indicates that our system of education is still uncomfortable with new technology, so the technology should make its proper use.

e) **Quest for excellence:** While contributing to national building and development of students, institutions should also demonstrate the drive to develop themselves into centres of excellence.

**Dimensions of Quality in Higher Education**

In the era of higher education, the adoption of quality control has been superficial and diluted by the exercise of academic freedom. However, the quality of higher education is very important to its stakeholders. The maximum mass integration of quality is product, software and service.

a) **Product Quality Dimensions:** Product dimensions include the following eight dimensions,

- **Performance:** It is concerned with the primary operating characteristics of a product. In higher education performance is the abilities to perform operations for specified purposes.
- **Features:** The characteristics which supplement the basic performance functions are called features. In higher education, flexibility of course offering could be a feature.
- **Reliability:** In higher education, it is the extent to which the gained knowledge is correct and up-to-date.
- **Conformance:** For higher education, it can be defined as the extent of meeting the established educational standards and its own promises to the client.
- **Durability:** In higher education it can be defined as the depth of learning.
- **Serviceability:** It is concerned with handling of complaints from students, staff and industry.
- **Aesthetics:** It is concerned with the design, looks, colour and presentation and how the customer views it.
- **Perceived quality:** It is concerned with the customer’s perception for quality product.

b) **Software Quality Dimensions:** The characteristics of software as an intangible product are more consistent with higher education. It includes the following dimensions;

- **Correctness:** The extent to which a programme or course complies with the specified requirements.
- **Reliability:** The degree to which knowledge or skills learned is correct, accurate and up-to-date.
- **Efficiency:** The extent to which knowledge or skills learned is applicable to the future career of graduates.
- **Integrity:** The extent to which personal information is secure from unauthorized access.
- **Usability:** The ease of learning and the degree of communicativeness in the classroom.
- **Maintainability:** How well an institution handles customer’s complaints?
- **Testability:** How fair examinations represent a subject of study?
- **Portability:** The degree to which knowledge or skill learned is applicable to other fields.
c) Service Quality Dimensions: The service quality dimension is probably more akin to the educational processes. The consumer is an integral part of this dimension. Thus, in higher education this framework is more applicable as the teaching learning situations are more like a service. However, it includes the following dimensions:
- Reliability: The service is carried out in the way it is promised.
- Responsiveness: The service is carried out promptly according to the needs of the customers.
- Competency: The staff of the service provider has the knowledge and skills required for delivering the service in a proper way.
- Access: It concerns the location, opening hours etc.
- Courtesy: How polite, friendly and respectful the employees are!
- Communication: It is the process of keeping the customers informed in a language that they could understand and also listening to them.
- Credibility: How trustworthy, believable and honest the service provider is.
- Security: Freedom from danger, risks or doubt.
- Understanding: The effort of the service provider to understand the needs and wants of the individual customers.
- Tangibles: Physical objects that are needed for carrying out the services such as facilities, equipment etc.

If we analyse the quality dimension of higher education through system approach, then it will be easier to understand. System approach is defined as a theoretical abstraction as an organized unitary whole composed of a set of interdependent, interrelated and interacting synergetic elements of a system. It mainly includes input, process and output units. The input units are the human resources (both students and teachers), physical resources in terms of infrastructures and financial resources. The educational processes and activities related to the curriculum, management and support mechanism form the process unit. Finally, the output dimension in the system are employable graduates, growth in knowledge through research publications, economics developments etc.

Quality assessment of higher education

Quality assurance is the responsibility of everyone in an educational institution, through the top management sets the policies and priorities. So, quality assurance should be a continuous process. However, accreditation as External Quality Monitoring (EQM) can be found in all types of higher education systems.

At NAAC, a four-stage process of external quality monitoring/assessment is undertaken;
- Identifying pre-determined criteria for assessment;
- Preparation and submission of the self-study report by the unit of assessment;
- On-site visit of the peer team for validation of the report and recommendation of the assessment outcome to NAAC;
- Final decision by the Executive Committee of NAAC

However, the following approaches are taken into account for quality assessment;

a) Self-evaluation/ Self-study: Real quality that is sustainable is one that is assessed by self. This is how we can know what our strengths and limitations are. The self-study report required for submission at the time of assessment for accreditation should be self-critical and reflective. Self-evaluation can be an indicator for continuous improvement and the first step for ensuring quality.

b) Best practices benchmarking: Benchmarking is a common topic in business, education and industry. It is defined as a continuous systematic process for evaluating the products, services and
work process pf organisation that are recognized as representing the best practices for the purpose of organisational improvements.

c) **External quality monitoring:** The process of external quality monitoring or assessment includes external stakeholders such as; employers, professional bodies and the general public about the legitimate quality of a higher education institution. For which a peer team is associated for external quality monitoring, which critically analyses the self-study report and the quality provisions based on established criteria.

d) **Market driven approach:** The issue of quality in education has become so important these days that rankings of educational institutions have become a huge business. However, most of these rankings depend on the ‘voices of the alumni’ and thus are perception based.

**Quality assessment tools**
Quality assessment is a conscious and planned process; therefore, some sorts of tools are required for it. However, the following eight tools are highly required for quality assessment.

a) **Process flow chart:** A flow chart is a symbolic/pictorial representation of the stages in a process. It records the series of activities and events in a process in such a way that communication becomes instant and clear. It is extremely used when a problem needs systematic approach.

b) **Graphs:** These are the tools to present information in a concise and graphical manner. There are different types of graphs that can be used to represent data for decision-making., like; histograms, pie charts, line graphs etc.

c) **Pareto analysis:** It is a tool used to prioritize problems for solutions. It says that 80% of problems stem from 20% of the causes. So, it is also called as 80-20 rule. Thus, by focusing 20% we can improve 80%.

d) **Fish-bone diagram:** It is also known as cause-and-effect diagram. It is a tool for analysis and open thinking in problem solving. In a diagrammatic representation, the effect is placed at the right end of a broad arrow. Major causes are recorded on either side of the effect line and minor causes as clusters.

e) **Scatter diagram:** This is a method to determine the relationship between the cause and effect in a pictorial manner. It shows pattern of association or otherwise of two variables/parameters.

f) **Check sheets:** These are often used as check lists or tally charts to ensure that some tasks in a process are done and measure how well they have been done. It ensures that everything is in order according to the design. So, some says that this is a quality control device by which we can weed out products that lack some checkpoints.

g) **Control charts:** Checklists are primarily used in statistical process control operations in manufacturing and product development to ensure that all the outputs are within an acceptable limit of variations.

h) **Brainstorming:** It is one of the most fundamental processes of generating ideas and solutions for problem solving. It involves participation of the stakeholders and thus teamwork is the hallmark of the process. This involves knowledgeable and experienced participants who share their ideas on a problem in a free-flowing manner without restrictions.

**Conclusion**
Higher education in our country is at cross roads, at one end there is high demand for access to higher education, and on the other quality in higher education is questioned. In order to survive in this globalized competitive world, all higher education institutions should play special attention to quality in higher education. However, NAAC has taken a number of steps to promote the quality in higher education through self-assessment, peer review, best practice benchmarking, brainstorming etc. At the
end, it can be critically examined that quality assurance in the academic system is utmost important. So, in this regard continuous improvement should be the *mantra* of quality assurance which makes all the stakeholders satisfied in their organization.

References

- Accreditation Board of Engineering and Technology, USA http://www.abet.org
- All India Council of Technical Education, India http://www.aicte.ernet.in
- Council for Higher Education Accreditation, USA http://www.chea.org
- Distance Education Council, India, http://dec.ac.in
- National Assessment and Accreditation Council, India http://www.naac-india.com/
  http://www.naacin.org
- Quality Council of India http://www.qcin.org