# NAAC – Quality Benchmarking in Technical Institutions

Dr. A. C. Attar<sup>1</sup>, S. R. Kumbhar<sup>2</sup>, Dr. Mrs. S. S. Kulkarni<sup>3</sup>

Abstract: The National Assessment and Accreditation Council (NAAC) is an autonomous institution, established by the UGC in 1994. The primary objective of NAAC is to assess and accredit institutions of higher learning with an objective of helping them to work continuously to improve the quality of education. According to the Ministry of Human Resource Development (HRD), India, only about 10-11% of the population in the relevant age-group is enrolled in higher education, and a mere 5% graduate with degrees. Quality assurance refers to the policies, attitudes, actions and procedures necessary to ensure that quality is being maintained and enhanced. Accreditation refers to an evaluation of whether an institution qualifies for a certificate status. The purpose of this paper is to highlight the NAAC processes and its implementation, especially in technical institutions.

Keywords: HEI, NAAC,

#### 1. Introduction

India has the second largest educational system in the world. A focus on quality, access and relevance of higher education to achieve the required social transformation for sustainable economic development of the country has been the national priority. Qualitative improvement in higher education, to realize the desired dimensions of human resource development necessitated the establishment of the premier Quality Assurance Agency – NAAC – by the UGC, in 1994, to assess and accredit the country's Higher Educational Institutions (HEIs). Quality assurance is not an event! It is a continuous process and a relentless pursuit to achieve academic excellence. It is an ongoing, dynamic and life-long endeavour of any institution [NAAC Manual on Student Participation in Quality Enhancement].

#### **Corresponding Author**

Auto. Engg. Dept., R.I.T., Sakharale Sanjay.kumbhar@ ritindia.edu

Before analysing the accreditation process it would be more appropriate to define the concepts of quality assurance and accreditation. The precise meaning of certain terms used in the context of accreditation is [P. Venkatesh, 2016]:

- Quality as "fitness for purpose" ability to meet the stated purpose of education
- Quality Assurance as "a process of continuous quality improvement"
- Assessment as "a process of evaluation of performance of an institution of Higher Learning and/ or its units, based on certain established criteria"
- Accreditation as "a quality assurance scheme wherein a
  certification of assessment given with a validity for a
  stated period of time and the recognition accorded to
  an educational institution that meets commonly
  accepted standards of quality or satisfies criteria laid
  down by a competent agency"
- Criteria as "predetermined standards for the functioning of an institution of Higher Education that form the basis of assessment and accreditation"

Quality assurance is the main driver for accreditation of oncampus programs by national and international accreditation agencies. It is ultimately the responsible of the institution themselves. The real and enduring quality can only come from by the universities as a result of selfevaluation and peer review. Quality assurance protects and enhances quality through system design and performance monitoring. Monitoring may occur informally in the course of collaborative practice. Quality assurance in higher education is-

- Defined as systematic management and assessment procedures adopted by a higher education institution or system to monitor performance and to ensure achievement of quality outputs or improved quality.
- Quality assurance aims to give stakeholders confidence about the management of quality and the outcomes achieved.

There are two major purposes which accreditation serves:

- Quality assurance, which determining standards of quality and performance for minimum acceptability in the interest of public.
- Quality improvement, which provides the service that is designed to improve institutions and programmes through an external review process.



<sup>&</sup>lt;sup>1</sup>Dean – QA, Rajarambapu Institute of Technology, Sakharale, Dist. Sangli - 415 414 (MS)

<sup>&</sup>lt;sup>2</sup>Automobile Engg. Dept., Rajarambapu Institute of Technology, Sakharale, Dist. Sangli - 415 414 (MS)

<sup>&</sup>lt;sup>3</sup>Director, Rajarambapu Institute of Technology, Sakharale, Dist. Sangli - 415 414 (MS)

<sup>&</sup>lt;sup>1</sup>abdulrashid.attar@ritindia.edu

<sup>&</sup>lt;sup>2</sup>sanjay.kumbhar@ritindia.edu

<sup>&</sup>lt;sup>3</sup>sushma.kulkarni@ritindia.edu

Quality assurance and accreditation in higher education is defined as systematic management and assessment of procedures adopted by higher education institution or system to monitor performance and to ensure achievement of quality improvement. Likewise Quality Assurance Agencies at the national level should focus on the efforts of internationalizing the education through assessing the seriousness of purpose, extent of the efforts taken so far at the policy and implementation level [Anju Verma, 2016].

### 2. National Assessment and Accreditation Council (NAAC)

National Assessment and Accreditation Council (NAAC), an autonomous body, has been established by the University Grants Commission in 1994 in pursuance of the recommendations made by the National Policy of Education, 1986 and the Programme of Action (POA), 1992 which lay special emphasis on evaluating the quality of higher education in India. As the primary goal of institutional accreditation by NAAC is to provide the information needed to improve the experience of the 'learning communities', it is envisaged that NAAC plays a larger role (Fig. 1) in internalizing and institutionalizing quality assurance [NAAC Manual on Student Participation in Quality Enhancement].

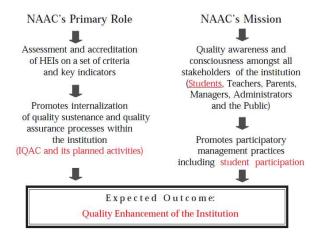


Fig. 1. NAAC's Role in the Quality of HEIs

NAAC assessment lays focus on the institutional developments with reference to three aspects: Quality initiative, Quality sustenance and Quality enhancement. The overall quality assurance framework of NAAC thus focuses on the values and desirable practices of HEIs and incorporates the core elements of quality assurance i.e. internal and external assessment for continuous improvement. The value framework of NAAC starts with its choice of unit of evaluation i.e. the Institution as a whole. The A&A process of NAAC which involves a combination of self evaluation and external peer evaluation implicitly or explicitly is concerned with looking at the developmental aspects of the HEIs in the context of quality [NAAC Manual on Student Participation in Quality Enhancement].

The accreditation framework of NAAC is based on foundation of five core values as shown below in depicted Table 1.

Table 1. NAAC Values and Goals

Values/Goals	Suggested Parameters/Activities		
1. Contribution to National Development	<ul> <li>More access with equity</li> <li>Developmental thrust in identification of research areas and academic programmes</li> <li>Community engagement</li> </ul>		
2. Fostering Global Competencies among Students	<ul> <li>Development of generic skills</li> <li>Development of application skills</li> <li>Development of life skills</li> </ul>		
3. Inculcating Value System in Students	<ul> <li>Value integration in academic Programmes</li> <li>Value integration in management practices</li> <li>Value inculcation through co- curricular and extracurricular Activities</li> </ul>		
4. Promoting the Use of Technology	For enrichment of learning     For increasing the access online programmes     For system management		
5. Quest for Excellence	<ul> <li>Development of benchmarks of excellence</li> <li>Best Practices application</li> <li>Institutionalization of continuous improvement systems</li> </ul>		

The NAAC functions through its General Council and Executive Committee where educational administrators, policy makers and senior academicians from a cross-section of system of higher education are represented. Under the new methodology introduced by NAAC w.e.f. 1st April, 2007, the higher education institutions are assessed and accredited by a two-step approach. In the first step, the institution is required to seek 'Institutional Eligibility for Quality Assessment (IEQA)'. Higher Education Institutions (HEIs) like any technical institutions, are eligible to apply for the process of Assessment and Accreditation (A&A) of NAAC, if they have a record of at least two batches of students graduated or been in existence for six years, whichever is earlier and fulfill the other conditions or are covered by the other provisions.

The eligible institutions are required to fill up online Letter of Intent (LOI). During online submission of LOI, the following documents, in case of colleges, (if applicable) have to be uploaded in .pdf form.

- Latest letter of affiliation from the parent university
- UGC 12B recognition certificate
- Latest grant certificate
- Latest recognition / approval letter from a regulatory authority, if the HEI is offering professional courses for e.g., AICTE, NCTE, DCI, etc...
- Letter from UGC regarding award and continuance of autonomy

#### Special Issue of National Conference NCIEME 2016 Organised by Rajarambapu Institute of Technology and Walchand College, Sangli ISSN 2394 - 1707

- Letter from UGC regarding award of CPE
- Suggestive format for Affiliation letter from the Universities

The timeline and procedure for NAAC is depicted in fig.2.

The Higher Education Institutions (HEIs) to submit the Letter of Intent (LOI) only after uploading the Self-study Report (SSR) on the institutional website. Procedures for LOI will be processed by NAAC and the decision in this regard shall be communicated within 15 days. The institutions will submit the registration fee (demand draft) so as to reach NAAC within 10 days of submission of LOI. The Institutional Eligibility for Quality Assessment (IEQA) to be submitted within the one week of acceptance of LOI. Timelines and The institution will submit the SSR within two weeks of acceptance NAAC will decide on the dates of visit and constitute the teams to visit the institutions within three weeks of receipt of SSR.

Fig. 2. Timeline and procedure for NAAC

The visit should ordinarily be completed within one month.

In general NAAC has formulated a three stage process for assessment and accreditation as given below:

- 1. Preparation of the Self Study Report (SSR) by the institution to be submitted to NAAC.
- 2. Validation of the self-study report by peers visiting the institution
- 3. The final decision of NAAC based on the self-study report and the recommendations of the team of peers.

The institute should prepare SSR as per the guidelines given by NAAC through respective manuals. The Questions in the Manual are very specific and to the point, and in certain cases, are exhaustive (What; Give details of etc). Some of the questions even redefine the understanding of higher education. Care should be taken while briefing and giving clear answers pertaining to institution, department or the teacher concerned. The expectations are very high in case of Teachers and Departments, as they have been brought to the centre stage of institutional assessment. Institutional contributions to Core Values are spread across the Questionnaire.

The SSR should include following information in sequence:

- Preface
- Content page
- Executive Summary inclusive of SWOC analysis of Institution
- Profile of the Institution
- Criteria-wise Evaluative Report not to exceed 200
- Department-wise evaluative Report to be provided by each Dept.

The second step is the assessment and accreditation of the institute (on the scale of 1 to 4) under the grades given in Table 2.

Table 2. NAAC Grading System (NAAC Manual)

Range of Institutional	Letter	Status
Cumulative Grade Point	Grade	
Average (CGPA)		
3.76 - 4.00	A++	Accredited
3.51 - 3.75	A+	Accredited
3.01 - 3.50	A	Accredited
2.76 - 3.00	B++	Accredited
2.51 - 2.75	B+	Accredited
2.01 - 2.50	В	Accredited
1.51 - 2.00	C	Accredited
≤ 1.50	D	Not Accredited

The criteria-wise marks for various categories are shown in Table 3.

Table 3. Criterion-wise Weightages (NAAC Manual Affiliated Colleges, Sept. 2016)

		University	Autonom	Affiliated/
	Criteria		ous	Constituent
			College	Colleges
I	Curricular	150	150	100
	Aspects			
II	Teaching-	200	300	350
	Learning and			
	Evaluation			
III	Research,	250	150	150
	Consultancy			
	and Extension			
IV	Infrastructure	100	100	100
	and Learning			
	Resources			
V	Student	100	100	100
	Support and			
	Progression			
VI	Governance	100	100	100
	Leadership and			
	Management			
VII	Innovations	100	100	100
111	and Best	100	100	100
	Practices			
	l .			
Total	Score	1000	1000	1000

#### Calculation of Institutional CGPA

Arriving at Institutional CGPA includes calculation of the Key Aspect-wise Weighted Grade Point (KAWGP), the Criterion-wise Weighted Grade Point (CrWGP) and the Criterion-wise Grade Point Average (CrGPA). The involves use of the pre-determined Weightages (W) and the

grade point assigned by the peer team for the 32 key aspects covering the seven criteria. The details for arriving at the KAWGP, CrGPA and CGPA are given below:

Key Aspect-wise Weighted Grade Point (KAWGP)

It is arrived at by multiplying the predetermined Weightage (W) of a Key Aspect with respective KAGP assigned by the peer team. i.e., KAWGPi= (KAGPi) x (Wi) Where, 'i' - represents the Key Aspects

Criterion-wise Grade Point Average (CrGPA)

It is calculated by dividing the Criterion-wise Weighted Grade Point (CrWGP) by the Weightage of that Criterion (Wi).

$$(CrWGP)j = \frac{CrGPAj}{Wj}$$

Where, 'j' - represents the Criterion *Calculation of CGPA* 

The sum of seven CrW GP divided by sum of the pre assigned Weightages of the seven Criteria will result in Cumulative Grade Point Average (CGPA) of the Institution. The institutional CGPA will be the deciding factor for accreditation status of the institution and its grade.

Institutional CGPA = 
$$\frac{\sum_{j=1}^{7} (CrWGP)_{j}}{\sum_{j=1}^{7} W_{j}}$$

#### 3. Criteria-Based Assessment of NAAC

The criteria-based assessment of NAAC forms the backbone of the A&A. The seven criteria represent the core functions and activities of an institution and broadly focus on the issues which have a direct impact on teaching-learning, research, community development and the holistic development of the students. The NAAC has identified the following seven criteria to serve as the basis for assessment of HEIs:

- 1. Curricular aspects,
- 2. Teaching-learning and evaluation,
- 3. Research, Consultancy and extension,
- 4. Infrastructure and learning resources,
- 5. Student support and progression,
- 6. Governance and leadership and
- 7. Innovative practices as the basis for its assessment procedure

The Criteria-based assessment promotes judgment based on values. For example the Criterion on "Governance, Leadership and Management" promotes the values such as participation, transparency, team work, systems view, justice, self-reliance and probity in public finance. The Key Aspects identified under each of the seven criteria reflect the processes and values of the HEI on which assessment is made. The questions under each of the Key Aspects focus in particular on the outcomes, the institutional provisions which contribute to these and their impact on student learning and development [NAAC Manual Affiliated Colleges, Sept. 2016]. The strengths or weaknesses in one

area may have an effect on quality in another area. Thus the issues addressed within the Criteria and Key Aspects are closely inter-related and may appear to be overlapping.

For the colleges affiliated to universities, the details of criteria are as shown in Table 4.

Table 4. Seven Criteria and Key Aspects of NAAC (NAAC Manual Affiliated Colleges, Sept. 2016)

	(NAAC Manual Affiliated Colleges, Sept. 2016)				
No.	Criteria	Key Aspects			
I	Curricular Aspects	<ul><li>1.1 Curriculum Planning and</li><li>Implementation</li><li>1.2 Academic flexibility</li><li>1.3 Curriculum Enrichment</li><li>1.4 Feedback System</li></ul>			
II	Teaching- Learning and Evaluation	<ul> <li>2.1 Student Enrolment and Profile</li> <li>2.2 Catering to Student Diversity</li> <li>2.3 Teaching-Learning Process</li> <li>2.4 Teacher Quality</li> <li>2.5 Evaluation Process and Reforms</li> <li>2.6 Student Performance and</li> <li>Learning Outcomes</li> </ul>			
III	Research, Consultancy and Extension	3.1 Promotion of Research 3.2 Resource Mobilization for Research 3.3 Research Facilities 3.4 Research Publications and Awards 3.5 Consultancy 3.6 Extension Activities and Institutional Social Responsibility 3.7 Collaborations			
IV	Infrastructure and Learning Resources	<ul> <li>4.1 Physical Facilities</li> <li>4.2 Library as a Learning Resource</li> <li>4.3 IT Infrastructure</li> <li>4.4 Maintenance of Campus Facilities</li> </ul>			
V	Student Support and Progression	<ul><li>5.1 Student Mentoring and Support</li><li>5.2 Student Progression</li><li>5.3 Student Participation and Activities</li></ul>			
VI	Governance, Leadership and Management	6.1 Institutional Vision and Leadership 6.2 Strategy Development and Deployment 6.3 Faculty Empowerment Strategies 6.4 Financial Management and Resource Mobilization 6.5 Internal Quality Assurance System (IQAS)			
VII	Innovations and Best Practices	<ul><li>7.1 Environment Consciousness</li><li>7.2 Innovations</li><li>7.3 Best Practices</li></ul>			

The self-evaluation process and the subsequent preparation of the Self-Study Report (SSR) to be submitted to NAAC involves the participation of all the stakeholders — management, faculty members, administrative staff, students, parents, employers, community and alumni. While the participation of internal stakeholders i.e. management, staff and students provide credibility and

## Special Issue of National Conference NCIEME 2016 Organised by Rajarambapu Institute of Technology and Walchand College, Sangli ISSN 2394 - 1707

ownership to the activity and could lead to newer initiatives, interaction with the external stakeholders facilitate the development process of the institution and their educational services. Overall it is expected to serve as a catalyst for institutional self-improvement, promote innovation and strengthen the urge to excel.

#### 4. Conclusion

The forces of globalization and liberalization influenced the Indian Higher Education in a big way. In a situation where Higher education, similar to the goods and other services has to compete internationally, quality assurance becomes inevitable. NAAC has been continuously fine-tuning its assessment and accreditation methodologies in tune with local, regional and global changes in higher education scenario, especially in technical institutions. This helps in reaching out to technical institutions and wider acceptance of the methodology.

#### References

Student Participation in Quality Enhancement – by NAAC, Bangalore, Available at <a href="https://www.naac.ac.in">www.naac.ac.in</a>

Anju Verma, "A review of quality assurance in higher education institutions", IMPACT Journals, International Journal of Research in Humanities, Arts and Literature (IMPACT: IJRHAL), ISSN (P): 2347-4564; ISSN (E): 2321-8878, Vol. 4, Issue 5, May 2016, 55-66

Dr. Parvathi Venkatesh, "Accreditation as a Benchmark of Quality Sustenance in Higher Education: A Review of Quality Assurance in Indian University System", NITTEE Management Review, Volume 7, Issue 1, July 2013, 59-67.

NAAC Manual Affiliated Colleges, Sept. 2016