QUALITY ASSURANCE IN HIGHER EDUCATION
(PREPARATION FOR NAAC-ACCREDITATION)

A Presentation By

PROF. KARAM PAL NARWAL
Director-IQAC

Guru Jambheshwar University of Science and Technology, Hisar-125001(Haryana)
(Accredited 'A' Grade with the CGPA of 3.26 by NAAC)

FREQUENTLY USED TERMS AND THEIR MEANINGS

❖ **Quality** as "fitness for purpose" – ability to meet the stated purpose of education

❖ **Quality Assurance** as "a process of continuous quality improvement"

❖ **Assessment** is "a process of evaluation of performance of an institution of Higher Learning and/or its units, based on certain established criteria"

❖ **Accreditation** is "certification of assessment given by the NAAC which is valid for a stated period of time and the recognition accorded to an institution that meets standards 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"

HIGHER EDUCATION SYSTEM IN INDIA

❖ **Long history of advanced education**

Hindu - *Gurukulas*; **Buddhist -** *Viharas*; **Quaremic -** *Madarasas*

Modern institutions of Higher Education: 1857

Three universities at Bombay (Mumbai) , Madras(Chennai) and Calcutta (Kolkata)

❖ **Large size:** More than 400 Universityies (Only 168 Accredited till date) Universities (includes Central, State, Private, Deemed and Institutions of National Importance). More than 17000 Colleges (Only 5231 Accredited till date) (Includes affiliated, constituent, autonomous, public aided and private etc.)

❖ **Huge Diversity:** Higher Education is in the concurrent list. National and provincial Governments have a role of play in this sector; Higher education mostly is in public domain (80% publicly funded and 20% privately funded); Different types of higher education institutions in size, resources, systems of governance and ownership

WHY ACCREDITATION

- **Education plays a vital role in the development of any nation. Therefore, there is a premium on both quantity (increased access) and quality (relevance and excellence of academic programmes offered) of higher education.**

- **Like in any other domain, the method to improve quality remains the same. Finding and recognizing new needs and satisfying them with products and services of international standards.**

- **The NAAC has been set up to help all participating institutions assess their performance vis-à-vis set parameters. A rating agency for academic excellence across India, and the country's first such effort.**

EXTERNAL QUALITY ASSURANCE AGENCIES

Agency and Year of Establishment	Domain of activities
1. National Assessment and Accreditation Council (NAAC), 1994 (Established by UGC)	All categories of higher education institutions (Institutional and programme accreditation)
2. National Board of Accreditation (NBA) 1994, (Established by AICTE)	Technical Education (programme accreditation)
3. Accreditation Board (AB), 2002 (Established by ICAR)	Agricultural Education (Programme and institutional accreditation)
4. Distance Education Council (DEC) 1992, (Established by IGNOU)	Distance Education (Programme and institutional accreditation)

- All these are in public domain
- Some private agencies, sponsored mostly by popular magazines, are engaged in rating of higher education institutions

CORE VALUES BY NAAC

(i)   Contributing to National Development

(ii) Fostering Global Competencies among Students

(iii) Inculcating a Value System among Students

(iv) Promoting the Use of Technology

(v)   Quest for Excellence

VALUE FRAMEWORK FOR ASSESSMENT OF HIGHER EDUCATION INSTITUTIONS

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

ASSESSMENT METHODOLOGY

Four stage approach

- Identifying pre-determined criteria for assessment
- Preparation and submission of self-study report (SSR) by the institution
- On-site visit by the Peer Team for validation of SSR and for recommending the assessment outcome to NAAC
- The final decision on accreditation by the Executive Committee of the NAAC

The Criteria of Assessment

The institutions are assessed on a 1000 point scale on seven criteria with different weightages to each criteria as follows

Criterion	University	Autonomous College	Affiliated College
Curricular Aspects	150	150	100
Teaching-Learning and Evaluation	250	300	400
Research, Consultancy and Extension	150	100	50
Infrastructure and Learning Resources	150	150	150
Student Support and Progression	100	100	100
Organization and Management	100	100	100
Healthy Practices	100	100	100
Total	1000	1000	1000

Average of all criteria is taken to measure the quality of performance

PEER TEAM CONSTITUTION

Universities

Chairperson   - Eminent Educationist/Vice-Chancellor/Director

Members (3 to 5) - Eminent Educationist/Professors

Co-ordination - NAAC academic staff

Colleges

Chairperson   - Eminent Educationist/ Vice-Chancellor/Director

Member –1   - Professor

Member – 2   - Principal/ Educational Administrator

Co-ordination - NAAC Academic Staff or External Member-Coordinator

Person from industry/service sector as an observer

THE OUTCOME OF NAAC-ASSESSMENT

A. The Grading System (Now linked with CGPA-Method)

Institutional Score (upper limit exclusive)	Grade
95-100	A++
90-95	A+
85-90	A
80-85	B++
75-80	B+
70-75	B
65-70	C++
60-65	C+
55-60	C

B. Peer Team Report - Peer Team prepares a report with commendations and recommendation for further improvement of quality of institutional operations. It is given to the institution and also is made public through website.

C. Provision for Appeal – Appeals Committee with members other than Peer Team Committee is constituted to address the appeals of institutions on grading awarded by NAAC

CRITERIA FOR ASSESSMENT

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**

CRITERIA FOR ASSESSMENT

1. CURRICULAR ASPECTS

2. TEACHING-LEARNING AND EVALUATION

KEY ASPECTS
i. Curricular Design and Development
ii. Academic Flexibility
iii. Feedback on Curriculum
iv. Curriculum Update
v. Best Practices in Curriculum Aspects

KEY ASPECTS
i. Admission Process
ii. Catering to Diverse Needs
iii. Teaching-Learning Process
iv. Teacher Quality
v. Evaluation Process & Reforms
vi. Best Practices in teaching & learning

3. RESEARCH, CONSULTANCY AND EXTENSION

KEY ASPECTS

- **Promotion of Research**
- **Research and Publication Output**
- **Consultancy**
- **Extension Activities**
- **Collaborations**
- **Best practices in research & consultancy**

4. INFRASTRUCTURE AND LEARNING RESOURCES

KEY ASPECTS

- **Physical Facilities**
- **Maintenance of Infrastructure**
- **Library as a Learning Resource**
- **ICT as Learning Resources**
- **Other Facilities**
- **Best practices in the development of infrastructure and learning resources**

5. STUDENT SUPPORT AND PROGRESSION

KEY ASPECTS

- **Student Progression**
- **Student Support**
- **Student Activities**
- **Best Practices in student support and progression**

6. GOVERNANCE AND LEADERSHIP

KEY ASPECTS

- **Institutional vision and Leadership**
- **Organizational arrangements**
- **Stategy development and deployment**
- **Human resource management**
- **Financial management and resource Mobilization**
- **Best practices in governance and leadership**

7. INNOVATIVE PRACTICES

KEY ASPECTS

- **Internal Quality assurance system**
- **Inclusive practices**
- **Stake holder relationship**

WEIGHTAGES FOR THE SEVEN CRITERIA

Curricular Aspects	150
Teaching Learning and Evaluation	250
Research, Consultancy and Extension	200
Infrastructure and Learning Resources	100
Student support and progression	100
Governance and Leadership	150
Innovative Practices	50
Total	**1000**

THE KEY ASPECT-WISE WEIGHTAGES

I Curricular Aspects

KEY ASPECTS WEIGHTAGES

i. Curricular Design and Development	90
ii. Academic Flexibility	30
iii. Feedback on Curriculum	10
iv. Curriculum Update	10
v. Best Practices in Curriculum Aspects	10
Total	**150**

HOW IS THE INSTITUTIONAL CUMULATIVE GRADE POINT AVERAGE (CGPA) COMPUTED

- ❑ **The grade for the Key Aspect under a criterion is decided, based on the Assessment indicator guidelines.**

- ❑ **Quality points are assigned to a specific letter grade i.e. 4 for A;   3 for B;   2 for C; and 1 for D.**

- ❑ **Each Key Aspect Grade point is denoted as Key Aspect one Grade Point (KA1-GP); Key Aspect two grade point (KA2-GP) and so on.**

- **The summated grade points of all the Key Aspects, under a criterion is calculated with appropriate weightages and divided by the criterion weightage for the institution, to arrive at the Grade Point Average for the Criterion(CR-GPA).**

- **Criterion Grade Point Averages (CR-GPAs) for all the 7 criteria are calculated.**

- **The CGPA is calculated for the institution, using the seven CR-GPAs and the application of the respective weightages as specified for each criterion.**

■ **The institutional CGPA is obtained by**

   i) Multiplying the criterion GPA by the respective weightage.

   ii) Taking the sum of all these weighted scores and dividing by the total weightage i.e.1000.

■ **The CGPA thus obtained will be the final Institutional Quality Level on a four-point scale.**

EXAMPLE FOR ASSESSMENT OF CGPA

**Take the Key aspect Matrix
for Criterion I -Curricular Aspects**

Key Aspect Matrix	Key Aspect Matrix Assessment

**1. Curriculum design
   & development** → **KA1 GP = $X_{1.1}$**

2.Academic flexibility → **KA2 GP = $X_{1.2}$**

3. Feedback on curriculum → **KA3 GP = $X_{1.3}$**

4. Curriculum update → **KA4 GP = $X_{1.4}$**

**5. Best practices in
   curricular aspects** → **KA5 GP = $X_{1.5}$**

$$(X_{1.}) = \frac{(90 \times X_{1.1}) + (30 \times X_{1.2}) + (10 \times X_{1.3}) + (10 \times X_{1.4})(10 \times X_{1.5})}{150}$$

A sample calculation for 'X' as GPA

Curricular key Aspects grade	Weightage	Key GP	KAGP Aspect	Total Weightage Points
1. Curriculum design& development	90	3	90 x 3	270
2. Academic flexibility	30	2	30 x 2	60
3. Feedack on curriculum	10	4	10 x 4	40
4. Curriculum update	10	3	10 x 3	30
5. Best practices	10	3	10 x 3	30
Total	**150**			**430**

- **GPA for Criterion I - Curricular Aspects(X_1)= 430/ 150 =2.86; Similarly, for all criteria, the GPAs are calculated.**

- Similarly, the Criterion Grade Point Averages calculated for the remaining Six criteria, based on the key aspects under each criteria and their differential weightages, are given as:

Criterion II	GPA $=X_2$
Criterion III	GPA $=X_3$
Criterion IV	GPA $=X_4$
Criterion V	GPA $=X_5$
Criterion VI	GPA $=X_6$
Criterion VII	GPA $=X_7$

- The next step is to calculate the final Cumulative Grade Point Average (CGPA) by applying the specified weightages for the criteria-wise GPAs.

- **Cumulative Grading Point Average (CGPA) of the University**

$$= \frac{(150 \times X_{1.}) + (250 \times X_{2.}) + (200 \times X_{3.}) + (100 \times X_{4.}) + (100 \times X_{5.}) + (150 \times X_{6.}) + (50 \times X_{7.})}{1000}$$

- **Where 150, 250, 200, 100, 100, 150, 50 are the weightages for the seven criteria of the university and 1000 is the maximum score**

Assessment for an 'X' University

- **The GPA for different criteria for an 'X' University/College is given below:**
  - **Criterion I**   **GPA = X1 = 2.9**
  - **Criterion II**   **GPA = X2 = 3.0**
  - **Criterion III**   **GPA = X3 = 3.5**
  - **Criterion IV**   **GPA = X4 = 2.7**
  - **Criterion V**   **GPA = X5 = 3.0**
  - **Criterion VI**   **GPA = X6 = 3.1**
  - **Criterion VII**   **GPA = X7 = 2.5**

- **The cumulative grade point average for the 'X' University will be**

$$= \frac{(150 \times 2.9) + (250 \times 3.0) + (200 \times 3.5) + (100 \times 2.7) + (100 \times 3.0) + (150 \times 3.1) + (50 \times 2.5)}{1000}$$

$$= 3.04$$

- **"3.04" is the overall CGPA for an 'X' University/College.**

The accredited institutions will be graded on a 3- letter grade as follows:

Range of institutional Cumulative Grade Point Average (CGPA)	Letter Grade	Performance Descriptor
3.01-4.0	A	Very Good (Accredited)
2.01-3.0	B	Good (Accredited)
1.51-2.0	C	Satisfactory (Accredited)

- **The university under consideration gets the performance descriptor "Very Good" and the letter grade "A"**

- **Institutions which secure a CGPA equal to or less than 1.50, are notionally categorized under the letter grade "D" (Performance Descriptor: Unsatisfactory; Status: Not Accredited).**

- **Such institutions will also be intimated and notified by NAAC as "Assessed and Found not Qualified for Accreditation".**

Basic Guidelines on Preparation

✓ Vision and Mission statements of the university and of the college to be displayed.

✓ Creation of websites for all the colleges/departments.

The websites may contain the following information:

- Goals and objectives
- Program options
- Eligibility criteria
- Admission policy and process
- Academic calendar
- Examination and other assessment schedules and procedures
- Infrastructure facilities available for teaching, learning, sports, residence, research and recreation
- Scholarships given by the state and institution
- Fee structure

- **Alumni association**
- **Data banks, Event registers, Hand books**

  - **Data banks to consist of all academic activities of teachers**

  - **Event registers to maintain all the activities of the Departments/Colleges**

  - **Hand books containing information about faculty, courses, almanac, research and other facilities available in the Departments/ Colleges.**

- **Provide internet facility to all departments in the colleges and provide access to all students, teachers and research students.**

- **Constitute a college level Research Advisory Committee to encourage and guide teacher applying for research projects and monitor research work done.**

- **Provide Assistance to teachers for filing patents and Creation of student councils, appointment of teacher counselors and a lady counselor for all Departments/ Colleges.**

- **Creation of placement and guidance cells in all departments/colleges.**

- **Organizing seminars in all colleges for students through students councils to get feedback from the students regarding the academic activities of the departments & colleges and any other students problems**
- **Suggestions to be invited for enhancement of quality.**
- **Provision of basic facilities like telephone, safe drinking water, toilet facilities in all departments/colleges.**
- **Introduction of teacher-ward system in the departments/colleges.**
- **Undertaking of community activities – each college to adopt 2 or 3 villages under NSS activity.**

- **Creation of academic audit units in all colleges.**

- **Collection and analysis of feedback for students and employees.**

- **Arranging parent teacher meets.**

- **Undertaking programmes for soft skills and personality development**

BENEFITS OF ACCREDITATION

- Helps the institution to know its strengths, weaknesses and opportunities through an informed review process.
- To identify internal areas of planning and resource allocation.
- Out come provides funding agencies objective data for performance funding. Initiates institutions into innovative and modern methods of pedagogy.
- Gives institutions a new sense of direction and identity.
- Provides society with reliable information on quality of education offered.
- Employers have access to information on the quality of education offered to potential recruiters.
- Promotes intra and inter-institutional interactions.

IMPACT OF NAAC Accreditation

- ❖ Generated more interest and concerns about Quality Assurance among the stake holders of Higher Education

- ❖ Created better understanding of Quality Assurance among Higher Education Institutions (HEI's)

- ❖ Triggered Quality Assurance activities in many of the Higher Education Institutions

- ❖ Helped in creation of institutional database of the accredited institutions of Higher Education

- ❖ Helped other funding and regulatory agencies to take some of their decisions based on the assessment outcomes

THE CONCERNS

- Appropriate methodologies for assessment of large number of institutions

- Identification of 'right things' to assess the quality of provision

- Reliability of grading and relevance of Peer Team report.

- Recognition of accreditation

- Multiple agencies and co-ordination among them.

- Accreditation of cross-border education

- Limited Autonomy of assessment agencies

THE LESSONS OF EXPERIENCE

- ❖ Government association and support is critical to the effectiveness of external assessment agencies

- ❖ Simple and quantifiable criteria of quality assessment will bring more credibility to the operations

- ❖ Transparency of the process brings more accountability and reliability to the operations

- ❖ Involvement of academia is critical to their acceptance of external assessment activity

- ❖ Internal Quality assurance systems and processes is a pre-condition for the successful operation of external quality assurance system

- ❖ E-assessment systems may have to be adopted to address the problem of assessment of large numbers and to reduce subjectivity in judgments of quality

- ❖ Quality assessment institution as a role model of quality is critical to the effectiveness of its operations

Prof. Karam Pal Narwal
Director, IQAC
Guru Jambheshwar University of Science and
Technology, Hisar-125001 (HARYANA)

THANK YOU !!!