Qualitative Aspects of Quantitative Metrics of Self Study Report in the Accreditation Process for Assessment of Higher Education Institutions

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ABSTRACT
Accreditation is a process of review that allows educational organizations to demonstrate their ability to meet regulatory requirements and standards established by a recognized organization of national stature such as accreditation standards by accreditation agency like NAAC. Accreditation standards are always created by keeping in mind the requirement and ability of various stakeholders. The HEIs which apply for accreditation process must provide the details about meeting the standards established by a recognized accreditation agency through Self Study Report. Qualitative and quantitative metrics are devised by NAAC with an objective to enhance quality education in the country. This paper discusses the qualitative aspects of quantitative metrics of Self Study Report in the accreditation process for assessment of higher education institutions in India. The qualitative and quantitative metrics are framed in such a way that it simultaneously enhances the academic growth for students and infrastructural advancement of the HEIs. The importance of quantitative metrics to meet the standards established by the accreditation agency and to create and maintain an overall environment conducive to teaching, learning, research and to develop constitutional and moral values among various stakeholders are discussed in brief.

1. Introduction
Being the third largest education system of the world, next to the United States and China, as of 2020, India has over 1000 universities comprising of 54 central universities, 416 state universities, 125 deemed universities, 361 private universities, 7 Institutes under State Legislature Act, and 159 Institutes of National Importance which include IIMs, AIIMS, IITs, IIITs, IISERs and NITs among others. Other
institutions include 52,627 colleges as government degree colleges, private colleges, standalone institutes and post-graduate research institutions, functioning under these universities as reported by the MHRD in 2020. Assessment and Accreditation of quality level maintained by these Higher Education Institutions (HEIs) is monitored by 15 autonomous institutions established by University Grants Commission (UGC). The National Assessment and Accreditation Council (NAAC), Bangalore, is one of the premiere institutions that carries out the assessment and accreditation process for colleges and universities in different categories based upon the type and number of courses being run by these HEIs. Considering the cognizance of the diversity in the types of institutions, HEIs have been grouped under three categories namely, Universities, Autonomous Colleges and Affiliated/Constituent Colleges. The standard accreditation process involves the submission of Institutional Information for Quality Assessment (IIQA) and Self Study Report (SSR), respectively, and their subsequent approval by Independent Third party Testing agency assigned by the NAAC through Data Validation and Verification process (DVV). A NAAC peer team comprising of 2-5 members visits the HEIs. Based on their recommendations and scoring in SSR, final grades are decided by the Executive Council of NAAC in Standing Committee meetings, held at regular intervals. As per Revised Accreditation Framework (RAFs) effective from December 2019 for UG and PG colleges updated on NAAC websites, the SSR consists of 36 qualitative and 60 quantitative metrics, out of which a few are inter-related, while others are independent. Qualitative and quantitative metrics are devised by NAAC with an objective to enhance quality education in the country. Aim of the present paper is to discuss the qualitative aspects of quantitative metrics of Self Study Report in the assessment and accreditation process of UG and PG affiliated colleges. Emphasis is given to quantitative metrics in Self Study Report as these are crucial for evaluation since these cover approx. 70% of assessment scores over 30% of qualitative metrics.

2. Criteria and Key Indicators

The SSR document is divided into seven criteria and thirty four key indicators which cover the academic activities, infrastructural and physical facilities available with HEIs, Student Support and Progression and role of Internal Quality Assurance Cell (IQAC) of the college to maintain the quality culture in Higher Education Institutions (HEIs). The criterion-wise description of qualitative aspects of various quantitative metrics is discussed below.

2.1. Curricular Aspects

This criterion consists of eight quantitative and three qualitative metrics on the curriculum and syllabus of various courses and programmes, applicable to both UG and PG levels, being run by the HEIs and is having a weightage of 10% in total grading. The quantitative metrics are focused mainly on the number of courses or programmes introduced during the last five years, number of programmes in which CBCS and Electives System is implemented, number of add-on courses and average number of students admitted in the certificate and diploma courses. This matrix enforces HEIs to introduce more skill-based courses to cater to the needs of market and industries in future. The students' feedback regarding the syllabus and curriculum is also important in a student centric education system which is also covered in this criterion. The details regarding the members of various committees of universities in this criterion also motivate the faculty members to enrich their achievements at university and higher levels. This criterion puts an emphasis on the improvement and addition of various courses to address the futuristic needs of society as well as industries.
2.2. Teaching- Learning and Evaluation

This criterion consists of nine quantitative and seven qualitative metrics on the teaching learning and evaluation of the students admitted and is having a weightage of 35% in total grading. The details of the student enrollments and seats filled against reserved categories are targeted in this criterion. It enforces the institution to increase their Gross Enrollment Ratio (GER), which is also promoted in National Education Policy-2020. The data related to number of full-time faculty working against sanctioned posts, Teacher-Student and Teacher-Mentor ratio, Teachers' Teaching Experience and highest qualification of teachers is enquired in this criterion. This compels the institution to fill their vacant positions from time to time with well qualified and experienced teachers to improve the Teaching-Learning and Evaluation process for the students. Academically sound profiles of the teachers also motivate the students to opt for the college for their higher education, which ultimately improves the GER. A qualified and experienced teacher can also handle the diverse nature of the students i.e. a fast and a slow learner, on a single platform of classroom. An appropriate Student-Mentor ratio also boosts the students' confidence to represent their problems as well suggestions about academic and other related issues and to improve the overall teaching-learning and evaluation (TLE). As per the guidelines issued by the UGC and followed by universities, every institute has to publish the Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs). The attainment levels of these POs, PSOs and COs are evaluated by the institution based upon different criteria like pass percentage, average CGPA or SGPA, average percentage of marks obtained, or grades obtained by the students etc. This process of evaluation of POs, PSOs and COs offers the institution to adopt and innovate different teaching and learning methods or strategies to improve the TLE. The Student Satisfaction Survey (SSS) which is very important for the institute to get feedback from the students related to teaching-learning and evaluation process and serves as a basis for HEIs as well as accreditation agency to find out the average satisfaction level of the students. Seven qualitative metrics provide the supplementary information which is not covered in the nine quantitative metrics. The criterion covers all the quality aspects of TLE and HEIs can score well by implementing various requirements mentioned in the criterion, without much additional financial burden.

2.3. Research, Innovations and Extension

This criterion consists of ten quantitative and one qualitative metrics on the Research, Innovations and Extension (RIE) activities related to faculty as well as the students and is having a weightage of 11% in total grading. This criterion encourages the HEIs to improve the research and innovation culture among teachers and students and through them in the institution as well. The number of research projects and grants received from various government and non-government organizations, number of research papers published in National and International journals, book chapter details demanded in this criterion encourages the faculties of HEIs for research. The faculty members can apply for research projects based upon their experience and field which ultimately helps the society, country progress as well as to uplift the individual professional achievements. The funds released under various research projects and schemes can also be used to increase the research and infrastructure facility at HEIs and hence enrich the institute's physical and others facilities for all stakeholders. This criterion also motivates students of UG and PG colleges to take part in research and innovation from the start of their career. The institute can organize various seminars, conferences and workshops for students and faculty to provide a platform for various stakeholders to meet and discuss the emerging and futuristic requirements and developments with most igniting minds i.e. students as well as young faculty members.
The details about the number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc. (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs and average percentage of students participating in extension activities and number of awards and recognitions received for extension activities from government/government recognized bodies are also required in this criterion. This criterion allows the HEIs to interact with various sections of society through various cells of the institute like NCC, NSS, YRC, Red Ribbon Club etc. The students of the college become familiar with various societal issues and problems that the society is suffering from and also develops the ability in students to work with them. The students get a platform from where they can make impression on society and can develop leadership qualities and can also take part in social activities. The Institution is required to establish several collaborations/linkages for Faculty exchange, Student exchange, Internships, Field trips, On-the-job trainings, research etc. and functional MOUs with national and international institutions, universities, industries, corporate houses to make the students enriched with skills and vocational training. The availability of such MOUs and practices attracts the students from other districts as well as states to become a part of HEIs and hence increases the diversity in students' enrollment and causes increase in GER. The faculty members of the HEIs can motivate the students and increase the numbers of such activities to perform well in assessment process. This criterion evaluates the research, innovations and extension activities and weightage given to each matrix is so adjusted that HEIs with multi-disciplines can perform well.

2.4. Infrastructure and Learning Resources

This criterion consists of 10 quantitative and 03 qualitative metrics on the Infrastructure and Learning Resources related to library, internet and sports facility available for the students and having weightage of 10% in total grading. The library, laboratory and sports facilities along with ICT classrooms are the main part of HEIs Infrastructure. The appropriate weightage in various metrics of this criterion enforces the HEIs to enhance and create facilities like Smart Classrooms, DLS Projectors, Smart boards, Wi-Fi facility with high bandwidth and/or lease line, automated library, books and journals along with e-content materials like e-journals, e-books, CDs and DVDs. The faculty is also motivated for use of Open Education resources (OERs), subscription based or free services like INFILBNET, e-ShodhSindhu, Shodhganga, Databases, Remote access to e-resources. The administration is required to motivate the faculty and students to use the library and avail the facility available there and to create reading culture among them. The HEIs must plan a moderate or good amount of funds to increase the e-facilities, physical and academic support facilities like laboratory, library, sports complex, computers, classrooms etc. This criterion is designed to improve the physical and academic support facilities. It is observed that a government institute can score well in this criterion while the private and aided colleges lack to create such facilities due to paucity of funds, particularly in low strength or smaller rural colleges.

2.5. Student Support and Progression

This criterion consists of eleven quantitative and two qualitative metrics on the student support and progression and is having a weightage of 14 % in total grading. This criterion focuses on the support and progression of the most important stakeholder of the education system i.e. students. The aim of this criterion is to provide financial help to the financially weak and needy students as well as to the meritorious students. The students get benefitted by scholarships and freeships provided by the Government as well as by the institution/non-government agencies. An appropriate weightage for these metrics makes the HEIs to think about introducing various scholarship schemes so that bright and
deprived students who are having limited income sources can continue their education. As per the requirement under this criterion the HEIs have to arrange coaching and career guidance for various competitive examinations for the benefit of their students. A good number of students qualifying various competitive examinations like JAM/CLAT/NET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State government examinations also enhances the reputation and increases assessment score of HEIs for accreditation. Increase in placements and student progression in higher education represents the quality education and increases the alumni network of HEIs. The Institution is required to establish a registered Alumni association and invite alumni to interact and guide the students and share the experience so that students get motivated. The alumni contribution in terms of funds, books, invited talks; career guidance etc. helps the institution to improve quality in education, academics and placements of the students.

2.6. Governance, Leadership and Management

This criterion consists of ten quantitative and six qualitative metrics on governance, leadership and management and is having a weightage of 10% in total grading. This criterion enforces the HEIs to strengthen the role of IQAC and its activities. The IQAC in any institution is a significant administrative body that is responsible for all quality matters. It is the prime responsibility of the IQAC to initiate, plan and supervise various activities that are necessary to enhance the quality of the education being imparted in an institution. It is the responsibility of the institution to organize professional development/administrative training programmes through IQAC for teaching and non-teaching staff and ensure that their faculty members undergo online/face-to-face Faculty Development Programmes (FDP) Orientation/Induction Programmes, Refresher Courses, Short Term Courses etc. every year for their professional development. Institutions need to devise a Performance Appraisal System for teaching and non-teaching staff as well as strategies for mobilization of funds and the optimal utilization of resources received from government, non-government bodies, individuals and philanthropists. Fairly high weightage is given to activities of IQAC to implement the suggestions and feedback in HEIs as received from the accreditation agency and statutory bodies. The HEIs is required to organize regular meetings of Internal Quality Assurance Cell (IQAC) to collect feedback, analyze it and use it for valuable improvements.

2.7. Institutional Values and Best Practices

This criterion consists of six quantitative and six qualitative metrics on the institution values and best practices and is having a weightage of 10% in total grading. In this criterion, pressing issues such as gender equity, environmental consciousness and sustainability (enhancement in the renewable energy resources to meet HEIs energy requirements, reducing the power requirement by use of various low power devices, increasing the practice of effective waste disposal and water harvesting, promoting Green campus initiatives like restricted entry of automobiles, use of battery-powered vehicles, pedestrian-friendly pathways, ban on the use of plastics and landscaping with trees and plants etc.), inclusiveness (activities related to addressing local advantages and disadvantages like tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities) and professional ethics (to sensitize the students and employees to the constitutional obligations viz; values, rights, duties and responsibilities of citizens, to provide code of conduct for students, teachers, administrators and other staff) are covered. Institutions of higher education are required to conduct periodic programmes and to celebrate national and international commemorative days, events and festivals. The facilities related to gender sensitization (separate seating and parking facilities, promoting
gender neutrality policies) and to the divyangjans (build environment with ramps/lifts for easy access to classrooms, disabled-friendly washrooms, signages including tactile paths, lights, display boards and signposts, accessible website, screen-reading software, mechanized equipment, human assistance, reader, scribe, soft copies of reading material etc.) attracts the students from other districts and states too to become part of the HEIs. Every institution faces and resolves various kinds of internal pressures and situations also for implementing these issues. The institution has to develop best practices relevant to contemporary scenario which eventually increases the operational efficiency of the institution. Such practices which are evolved internally by the institution leading to improvements in any one or two aspects of its functioning related to academic, administrative or organizational issues are called as 'Best Practices'. Addressing such kind of issues, implementing and maintaining the standard of best practices with time, each institution performs well in at least one distinct characteristic which becomes its recognizable attribute in the surrounding area. Thus, quantitative metrics of this criterion help in improving the various concerns related to society and environment, which develops various constitutional and moral obligations, which in turn improve the overall environments of HEIs for their stakeholders.

4. Conclusions

As per the Revised Assessment Framework (RAF) for UG and PG colleges, the SSR consists of 36 qualitative and 60 quantitative metrics. The quantitative metrics in Self Study Report are crucial for evaluation as they cover 70% approx. of assessment scores over 30% of qualitative metrics. In order to obtain high assessment score, the HEIs have to work in both quantitative as well as qualitative aspects of SSR. The qualitative aspects of quantitative metrics of Self Study Report in the accreditation process are very important along with qualitative metrics. HEIs while working within their financial constraints, must plan to organize activities as per requirements of quantitative metrics, since, these are closely associated with the quality enhancement and help in maintaining quality culture in the institutions.

References


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