

A COMPREHENSIVE QA FRAMEWORK

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Abstract: Higher Education Commission (HEC) Pakistan was established to help national universities provide internationally competitive and compatible education. One of its core strategic aims is achieving excellence (Quality) in higher education. HEC's Quality Assurance (QA) Framework includes Internal Quality Assurance (IQA) and External Quality Assurance (EQA). IQA measures entail self-assessment of academic programs and university's internal quality audit whereas EQA practices include accreditation of programs by accreditation councils and universities' performance evaluation through HEC's Quality Assurance Agency (QAA). Author of this paper has first-hand experience of working for all four aspects of Framework. The paper gives an account of these aspects as being practiced in Pakistan for providing education that fulfills the expectations of stakeholders by meeting the threshold minimum requirements. The paper also describes various benefits accrued from the Framework exercises which are helping the universities to enhance quality of education as per national requirements and international standards.

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Introduction

HEC has developed Quality Assurance Framework to assure quality of education in the Pakistani universities which is compatible with international standards. The framework caters to the External Quality Assurance and Internal Quality Assurance measures and practices.

EQA practices have been developed and implemented through Quality Assurance Agency (QAA) of Pakistan at the institutional level and through accreditation councils at program level. QAA Pakistan was established by HEC in 2005 as a policy making and monitoring body for maintenance and enhancement of quality in higher education. Quality Assurance policies are prepared by QAA under the guidance of National QA Committee (NQAC) for the purpose to enhance the quality of teaching, learning and research in higher education institutions. NQAC comprises of eminent educationists, heads of higher education institutions and quality professionals as its members. QAA engages in systematic implementation of quality enhancement procedures /criteria to attain improved levels of international compatibility and competitiveness at institutional level. It also facilitates the capacity building of the accreditation councils and oversees accreditation of programs by these councils [1].

Self-Assessment of programs and University's Internal Quality Audit are the two aspects of IQA which are implemented through Quality Enhancement Cells (QECs). The QECs are the field units established at different universities for implementing the quality assurance policies and programs with uniform pace and standards. In 2006-07, Batch-1 QECs were established at ten public sector universities. More QECs have been set-up in different phases and their number has grown to 130 (87 in public and 43 in private sector universities) [2].

External Quality Assurance

An account of both the aspects of external quality assurance that is the Institutional Performance Evaluation of higher education institutions (HEIs) and the accreditation of programs is given below:

Institutional performance evaluation of universities: HEC has initiated the process to review individual Pakistani universities for evaluation of the quality of teaching, learning, research and other relevant activities conducted by the universities. On-site visits for the purpose of Institutional Performance Evaluation (IPE) are undertaken by the review panels constituted by QAA. HEC's recognition of an institution is awarded only as a result of successful review and evaluation. For the purpose of conducting these visits, HEC has developed following *Performance Evaluation Standards for the HEIs* [3]:

- Mission and Goals
- Organization and Governance
- Planning and Evaluation
- Integrity
- Faculty
- Students
- Academic Programs and Curricula
- Public Disclosure and Transparency
- Institutional Resources
- Student Support Services, and
- Assessment and Quality Assurance

These standards outline major areas to be focused on by HEIs for evaluation of their effectiveness and future development.

The IPE Process

The Institutional Performance Evaluation is carried out through the on-site visit to the universities/Higher Education Institutions (HEIs). An overview of the activities before, during and after the on-site visit is given below^[4]:

Pre – visit activities: QAA nominates the members of the panel from the pool of experts who are generally senior university teachers, administrative officials and quality experts. Before the visit, university to be evaluated is asked to provide the University Portfolio Report (UPR) for the study of the panel before the visits. UPR is a kind of self-assessment report which includes the information and data related to the standards against which the university is required to be evaluated.

The university is also asked to make available some documents to be reviewed by the panel during the visit as evidence to verify the information provided in the UPR. The documents are placed in the room allocated for the use of the Review Panel.

Before proceeding on the visit, the panel holds coordination meeting and chalks out the plan for the duration of the visit. Panel leader is appointed and the members are allocated specific chapters (standards) of UPR to study with the purpose of identifying potential commendations, recommendations and affirmations. Besides, they are required to prepare the questions on the basis of the total contents of UPR and particularly the chapters allocated to them and also identify the university officials supposed to answer these questions. The executive officer from QAA consolidates the questions prepared by the members.

The panels: The evaluation panels are constituted from the pool of local experts. Sometimes foreign experts are also associated with the panels. Some of the panel members already carry the experience of conducting the external reviews / evaluation at the national and international levels. The others are provided training with the help of local and foreign facilitators. Moreover, a batch of fourteen academics and the quality professionals have also been sent to UK for training from QAA, UK. An official of QAA assists each visiting panel as Executive Officer who coordinates with the panel members and the university volunteering to be reviewed. The Executive Officer also accompanies the panel during the review visit.

On-site visit: During visits, the panel meets the university Vice-Chancellor/Rector at the beginning and then reviews the documents which university places in the Panel Room as per the requirement of Panel. The policies and processes, human and physical resources, programs and curricula are evaluated against the requirements of standards. If required, the panel may ask some additional information/documents to satisfy their queries. Then the panel conducts interviews of Deans, Heads of Departments, senior and junior faculty members, undergraduate and graduate students of different semesters / disciplines and administrative / technical staff for the purpose of getting confirmations, clarifications and additional information. The panel also visits classrooms to observe the teaching process besides visiting libraries and laboratories to observe their state and functioning. The panel also interacts with the relevant staff. After these activities, the panel conducts a private meeting to decide upon observations to be shared with the head of the institution during the exit meeting. Finally, the panel conducts the exit meeting with the VC/Rector to brief about the salient observations made during the visit.

Post visit activities: The panel members send the reports regarding the chapters allocated to them before the visit to Executive Officer for consolidation. These reports mainly include the commendations for the

strengths of the universities and recommendations / affirmations to make up the deficiencies with necessary rationale. The Executive Officer consolidates the visit report and ensures that there are no deficiencies or the duplications. The consolidated report is shared with the panel members for getting their comments for any further improvement. The final report, after the approval of the competent authority at HEC, is sent to the University for taking actions to make up the deficiencies in the light of affirmations/recommendations included in the report. The university is also asked to provide periodic progress reports to HEC about taking the remedial measures till the completion of the actions.

The impact of IPE: Till date, thirty universities have been evaluated by the Panels of Experts. The author has been member of ten panels which conducted the institutional performance evaluation of different Pakistani universities. Heads of these universities generally felt indebted to the review panels for conducting the evaluation of their universities with positive approach and highlighting the areas for improvement. VCs/Rectors acknowledged the usefulness of this exercise. Some of them expressed during the exit meetings that although they were in knowledge of some of the areas (not all) requiring improvement but their identification by the panel has confirmed their point of view. This will provide them impetus to take the remedial measures with confidence. They intended to get benefit from the result of this exercise to make up their deficiencies by getting support from the HEC and their respective federal/provincial ministries to which they are associated with. EQA activity is certainly going to help these universities in enhancing the quality of education and research through improvement in the governance and management, different processes and procedures, human as well as physical resources, infrastructure, support system and quality assessment. The EQA exercise carried out in these universities, with a view point to bring in positive improvement and not for finding faults, has not only influenced them positively but has also encouraged the other universities to present themselves for the evaluation. Process of institutional performance evaluation is taking roots in Pakistan and is expected to make a discernable difference in the realm of quality assurance in higher education.

Accreditation of Programs

Program level EQA is achieved through the mandatory accreditation of the individual programs by their respective accreditation councils as per their Manuals. Currently, following thirteen such councils exist^[5]:

Accreditation councils existed before HEC:

- Pakistan Bar Council (PBC)
- Pakistan Council for Architects and Town Planners (PCATP)
- Pakistan Engineering Council (PEC)
- Pakistan Medical & Dental Council (PMDC)
- Pakistan Nursing Council (PNC)
- Pakistan Pharmacy Council (PCP)
- Pakistan Veterinary Medical Council (PVMC)
- National Council for Homoeopathy (NCH)
- National Council for Tibb (NCT)

Accreditation councils established by HEC:

- National Accreditation Council for Teachers Education (NACTE)
- National Agricultural Education Accreditation Council (NAEAC)
- National Computing Education Accreditation Council (NCEAC)
- National Business Education Accreditation Council (NBEAC)

HEC is planning to establish more such councils to accredit programs related to natural, social, biosciences, and humanities etc.

Accreditation process: The processes adopted for accreditation of programs by different accreditation councils are generally similar. Before initiating a new program, the institution / department has to apply for getting clearance/green-signal from the respective accreditation council by supplying the information specified by the Council. The on-site 'Zero Visit' to the proposed program is conducted by the Team of Experts constituted by the Council. If the level of preparedness for initiating the program is satisfactory and the institution/department has a plausible plan to develop the infrastructure/facilities as the program progresses through different semesters, the Team recommends granting the permission to start the program. Final decision is made by the accrediting committee.

After getting the clearance through Zero Visit, the program is required to apply for the Interim Visit as per the deadline set by the Council in the Zero Visit report. The program provides all the information as per the Council's questionnaire, along with the progress made on the zero visit observations, for critical analysis. The Interim visit report comments on the conformance of the requirements included in the zero visit report for adequate conduct of the program and identify any additional steps to be taken by the program before the accreditation visit.

For inviting the accreditation visit, the program forwards application to the Council along with self-assessment report. The visiting team prepares its report on findings/observations, which is sent to the program for its rejoinder. The report and the rejoinder received from the program are placed before the accreditation committee for the decision. The committee may decide for (i) no accreditation due to non-conformance to one or more criteria or serious deficiencies, (ii) pend the decision for removal of deficiencies, or (iii) award accreditation for a specified number of years. In case of pended decision, a confirmatory visit may be necessitated to confirm the removal of deficiencies indicated. The program accredited for a defined number of years has to apply to the respective council for its re-accreditation before the completion accreditation period.

During different visits related to the accreditation process, focus remains on the matters related to students, faculty, curriculum, processes, infrastructure/facilities and institutional support. All these visits by the accreditation councils are conducted on the same pattern as the Institutional Performance Review visits, as detailed above.

The programs in the country which are not covered by any accreditation council have to take permission for their initiation from the HEC. The permission to start a program is refused, deferred or granted on the basis of level of preparedness.

Internal Quality Assurance

Both the processes of Internal Quality Assurance, namely; self-assessment of programs and the university's internal quality audit are described below:

Self-assessment of programs: QAA has made the *self-assessment (SA) of academic programs* mandatory as per the criteria, detailed in the HEC's Self-assessment Manual [6], which include; (1) Program mission, objectives and outcomes, (2) Curriculum design and organization, (3) Laboratories and computing facilities, (4) Student support and guidance, (5) Process control, (6) Faculty, (7) Institutional facilities, (8) Institutional support. University's QEC initiates the SA process through the office of Rector/Vice-Chancellor followed by the formation of Program Teams (PTs) by the programs. PT comprises of the competent faculty members who are expected to do justice with the task of report writing. Completion of the SAR requires collection of feedback from students, faculty, head of department (HoD), alumni and graduates' employers through prescribed feedback/survey forms. The feedback so received is required to be summarized to draw various conclusions which make part of the report. The department is required to facilitate the team for timely completion of the report by providing requisite resources; both human as well as material. PT prepares the SA Report (SAR) on the program for the review of QEC. If SAR is found complete and satisfactory, the QEC forms an Assessment Team (AT) of professionals, preferably from outside the university, which visits the program under evaluation to verify the data / information included in the SAR and carries out Rubric Evaluation of the Report. AT examines the program's facilities, interviews the faculty, administrative / technical staff and students and compiles its findings. The findings include strengths and weaknesses of the program. Based on the findings regarding the weaknesses of the program, respective HoD prepares an Assessment Results Implementation Plan Summary suggesting the measures to remove the deficiencies identified by AT. The QEC writes an executive summary of SAR and submits it along with the Implementation Plan for the perusal/approval of Rector/V C. Program is required to take action on approved implementation plan, while QEC follows up to ensure the completion of the required actions.

Challenges for SA process: Some of the challenges faced in preparing the SARs and getting the feedback/survey forms filled by different stakeholders are listed below^[7]:

- Lack of administrative / financial support to QECs by the institutions.
- General resistivity/re reluctance of department faculty members to engage in the SA process on the basis of extra burden of additional work; collection/analysis of data, preparation of SAR
- Half-hearted or no cooperation of faculty in supporting the PT/AT in self-assessment process, provision of requisite information due to fear of exposing the weak areas of own department / program
- Limitations of program / assessment teams to undertake due to time constraint, lack of incentives, and possible lack of resources (human as well as financial)

- Lack of alumni and employers' feedback culture in the universities and the society.
- Lack of faculty/students' interest in providing realistic feedback.
- Hurdles by teachers' associations / student unions in some universities.

Remedy: In order to counter the above mention challenges, the university administration is required to show a strong resolve and commitment to implement the quality assurance policies and programs across all the university activities. A clear and firm message from Rector/VC to the Deans and Heads of the Departments (HoDs) emphasizing introduction of the quality regime can pave the desired way. Deans/HoDs need to motivate their faculty members to undertake the SA process with the spirit of bringing improvement in the functioning of university. The administration needs to provide the required support to QEC for carrying out its responsibilities, effectively. Moreover, all necessary resources should be provided to the PT and AT for completing the SA process. Both the teams should show the commitment in preparing the realist self-assessment reports. Faculty and students should be motivated to provide realistic feedback and cooperate with PT and AT for further improving the processes at the university. A close liaison with the alumni and strong linkage with the industry/corporate sector needs to be maintained for getting their feedback about the university programs. All the stakeholders should be informed of the actions taken on the basis of their feedback. All these measures can be quite helpful in advancing the quality assurance program at the university.

Capacity building for self-assessment process: HEC organizes seminars, conferences and workshops for the training of Heads of QECs to play their role as Quality Assurance managers effectively. For the purpose of providing QA awareness among the administrative and academic circles, QECs organize seminars, conferences, workshops and meetings at their own universities. Besides, workshops/seminars are arranged for the training of the members of program/assessment teams to efficiently participate in the SA process for the purpose of preparing SARs, carrying out their rubric evaluation and writing the AT reports and executive summaries. Some Heads of QECs conduct seminars/workshops as resource persons at national universities on the topics of QA awareness, SAR writing and roles of program/assessment teams, for the heads of the universities which established their QECs in later batches.

University's internal quality audits: Although, HEC's QA Framework lists down the need to undertake Internal Quality Audits of different institutions/campuses of the universities after the completion of self-assessment of programs, but only a couple of universities (NUST being one of them) conduct these audits. An Internal Quality Audit is conducted by the university's Internal Panel with the purpose of removing any deficiencies at the institutional level and preparing the University for any External Review. University Quality Standards and Assessment Model^[8] provides the guidelines to conduct Internal Quality Audit through on-site visit on the lines of external reviews.

The process: QEC initiates the audit process after necessary approval from the university's competent authority and constitutes the Audit Panel comprising different directors from University's Main Office. Dates for the audit are fixed with necessary coordination with the panel members and institution to be reviewed. QEC asks the relevant institution/campus to provide an Institutional Portfolio Report (IPR) for a review by the QEC and the Panel. The panel members review the IPR and prepare questions to be asked during visit. It is also identified that which question is to be asked from whom. QAD consolidates these questions. The Institution/campus is also asked to place some documents in the Panel Room reserved for the Panel during the visit. Main activities during the Internal Quality audit are similar to those carried out during Institutional Performance Review such as meetings with heads of universities, review of documents, visit to institutional facilities and interviews with the students, faculty and administrative / technical staff.

After the visit, the panel members forward their observations and recommendations to QEC for consolidation. The post-visit report, comprising the good practices and observations along with recommendations is presented to Rector/VC for perusal/approval through all the panel members. The approved report is forwarded to the institution for taking actions on the recommendations of the panel.

Both the IQA exercises i.e. Self-assessment of programs and the internal quality audit help programs/institutions in improving governance, enhancing quality of teaching, learning, and research and developing infrastructure/facilities.

Benefits of IQA

NUST is fully involved in conducting both the IQA exercises. In year 2013-14, forty programs prepared the self-assessment reports while nineteen teaching institutions out of twenty two have been subjected to internal quality audit. These exercises have helped NUST in developing leadership, improving governance and processes, enhancing quality of teaching and learning and developing physical and technological infrastructure. The IQA has been possible at NUST because of the unconditional support and commitment of the NUST senior administration to make the quality of its educational provisions comparable to the best anywhere in the world. As a result of the IQA measures, the institutions were benefited in the following areas:

- Inducting additional faculty to make up deficiency
- Lab up-gradation
- Improving learning resources
- Implementing student advising system
- Introducing faculty orientation/mentoring system
- Improving internet facility in campuses/hostels
- Access of faculty to policy documents
- Reviewing / streamlining different processes
- Improving transport facility for faculty/students
- Introducing research culture
- Rationalization of faculty work load
- Ensuring implementation of various policies
- Taking effective QA measures
- Awareness and usage of digital library
- Gauging performance of the institution
- Preparation for the future accreditation visits
- Improvement in library facility
- Direct/true feedback from faculty / students
- Flow of information upto the Rector/Pro-Rector (Academics),
- Assuring the implementation of the policies of HEC and respective Council, etc.

International recognition: NUST IQA program has received the international acclaim and Asia Pacific Quality Network (APQN) has bestowed upon NUST the APQN's Best/Model Internal QA Award 2014 during a ceremony held at Hanoi, Vietnam on March 7, 2014. The Award has been given to NUST for demonstrating a good practice that has potential of adaptation among APQN members.

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