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Newsletter

Quality Enhancement Cell

Quality is not an act, it is a habit.

-Aristotle

Message from Vice Chancellor

Dr. Ijaz Ahmad Malik, Air Cdre (R),
Sitara-e-Imtiaz (Military)



Quality is a concept, it is a philosophy, it is a journey and it is also what we practice. Quality for us is all of these. In a society full of diversity and opinions, higher education means different to different people and quality in higher education is not just about the higher level of educational structure in the country but to impart in depth knowledge to advance the students to new frontiers of knowledge in different walks of life. Higher education is back bone of any society; it is the quality of higher education that decides the quality of human resources in the country. Air University being a progressive institute, emphasis on quality of teaching, research, Integrity of character and passion for life- long learning. The quality knowledge develops student's ability to question and seek truth and make him/her competent to critique on contemporary issues. In this regard quality Enhancement Cell was established in October, 2010 to adopt formal, transparent and credible system of Quality Assurance with external verification of outcomes and processes to bring excellence in our academic activities. This newsletter provides glimpse of Quality Enhancement Cell activities carried out to promote quality in education at university.

Message from Advisor Quality

Air Commodore Abdul Wahab Motla



Quality in higher education is one of the three pillars on which whole structure of higher education in Pakistan has been based. The issue of quality in higher education is quite complex and needs clear comprehension for proper understanding. Quality is a relative term which refers to the position of a particular outcome against pre-defined criteria's and standards. Quality Enhancement Cell at university has developed the processes to implement these criteria's and standards and monitor through regular internal / external assessments. Quality Enhancement Cell played pivotal role in development of Self-Assessment Reports, training of program teams and creating awareness amongst faculty members. The efforts made by program teams at each department to develop documents and implement processes are highly praiseworthy. Quality Enhancement Cell has achieved highest 'W' category during quantitative assessment by HEC in short span of one year. This newsletter provides an overview of all activities undertaken by QEC since its establishment.

Quality in Higher Education

Air University, Islamabad

Globalization has created a global market-place for students and scholars. It has resulted in massive expansion of higher education especially in the developing world. Institutions of higher education now have to produce graduates for a global market. In order to meet emerging demands and challenges pertaining to quality in higher education, Air University has made significant progress in very short time. Air University has established Quality Enhancement Cell (QEC) with an aim to enhance quality of higher learning, integrate the concepts of quality in the higher learning systems, develop quality assurance processes and build capacity of faculty members and staff to implement criteria's and standards.

Quality Enhancement Cell (QEC) at Air University

Air University is a dynamic community of students, teachers and staff, committed to perform their duties at the highest standards. National and International concerns about quality of education in higher education institutions, has demanded change from traditional modes of teaching research, learning and management and to adopt a formal, transparent and credible systems of quality assurance with external verification of outcomes and processes, keeping in view these requirements. Quality Enhancement Cell has been established at Air University as per directive of HEC. Quality Enhancement Cell is responsible to promote higher standards of education and research in the University and develop quality assurance processes and evaluation methods.

AU Vision Statement

Air University aspires to be among the leading national universities, excelling in teaching, learning, research, innovation and public service.

AU Mission Statement

The mission of Air University is to achieve excellence in teaching and research for producing graduates with sound professional knowledge, integrity of character, a keen sense of social responsibility and a passion for lifelong learning.

The University shall stand committed to creating an environment conducive for attracting the best students, faculty and supporting staff for contributing to the development of a prosperous, peaceful and enlightened society.

QEC Mission Statement

Quality Enhancement Cell of Air University is committed to enhance the quality of education at each department by implementing effective and efficient quality assurance system to fulfill requirements of all stakeholders.

QEC Vision Statement

The vision of Quality Enhancement Cell is to bring excellence in all programs offered at Air University in the next five years.

Quality Policy at Air University

Air University will serve the community and meet the challenging needs of national and international market by providing quality higher education through effective and efficient quality assurance system underpinned by quality teaching, learning and research. University will also inculcate ethical values in students through its programs to become better citizens.



Objectives of QEC

Effective Institutional Quality Assurance(QA) processes assess quality against their mission and related objectives. The university in this QA system has adopted quality as "Fitness for Purpose" a concept that stresses the need to conform generally accepted standards defined by Higher Education Commission. The objectives of Quality Assurance (QA) policy includes following:

- To bring our educational standards at par with recognized international standards.
- To implement HEC criteria for higher education and promote quality culture.
- To establish quality assurance system to fulfill requirement of all stake-holders.
- To take measures for capacity building of faculty members and staff through training.
- To review the quality standards by auditing academic standards and quality of teaching and learning.

Milestones achieved by QEC

Following milestones have been achieved by Air University QEC since Oct 2010.

1. Nine awareness sessions were conducted on concept of quality in HEI's for faculty members.
2. Five Training sessions were conducted for faculty members involved in development of Self-Assessment Manual.
3. Five seminars on quality were conducted for graduating students at different departments.
4. A training workshop on quality was conducted at Multan Campus on 22 Oct, 2011.
5. Self-Assessment Manuals for eight different departments have been completed, audited and implemented.
6. Webpage for quality has been developed www.au.edu.pk/qec and up loaded on AU network and fully functional.
7. HEC conducted annual quantitative assessment for scoring of QEC ,highest category of "W" has been achieved

Training & Awareness Sessions

Training sessions were conducted for faculty members at each department on writing Self-Assessment Manuals as per HEC requirements. Awareness sessions for faculty members and students were also organized at each department during last one year. QEC staff provided full support to departments in preparation of reports.

Seminars

Keeping in view the importance of quality in field of industry, services and academia, QEC organized seminars to create awareness amongst graduating students. This activity enlightened young graduates on Quality Assurance concepts,

Resource Persons for Seminars

- a) Air Cdre Abdul Wahab
- b) Air Cdre(Retd) Anwar Saeed
- c) Air Cdre Afzaal Ahmad Khan
- d) GP Capt (Retd) Ejaz Yaqub
- e) Ms Fazaila Qazi

Clients of Presentation

A) ISO 9000-2000

ISO 9000 is a series of standards describing the requirements for establishing and maintaining a quality management system in an organization. ISO standards originated from military standards in 1940 and evolved into NATO Standards in 1970, then to British Standards in 1979 and finally emerged as ISO 9000-2000. These standards are applicable to both goods and services business. It involves third party certification. Initially it had 20 clauses but now merged into following five sections:

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1. Quality System
2. Product Realization
3. Resource Management
4. Measurement, Analysis and Improvement
5. Management Responsibilities

It involves top management commitment by defining quality policy and objectives along with motivating people and provisioning of resources. It focuses on continual improvement through management reviews, data analysis, corrective/preventive actions and quality audits based on customer feedback.

B) Six Sigma Concept

Six sigma is a quality concept and the term was coined by Bill Smith, an engineer in Motorola Company, who started to use statistical tools for solving problems in 1970. The word "Sigma" is used to designate the distribution or spread about mean of any process. The sigma capability is a standard that indicates how well the process is performing.

Six sigma is hence a quality indicator for business processes. The figure of six sigma was arrived statistically by looking at current average maturity of most business enterprises. The increase in performance and decrease in process variation leads to defect reduction, vast improvement in profits, employees morale and quality of product. Six sigma processes only allows 3.4 defects per million opportunities. There are seven QC tools used to organize the collected data. These include check sheets, Pareto Charts, Cause and Effect Diagrams, Histograms, Scatter Diagrams, Flow charts and Control Charts. When six sigma is practiced as a management, it is high performance system for executing business strategy.

It provides top down solution to help organization and mobilizes teams to attack high impact projects. The individual levels of skills are denoted by green, black and master black belts. The six sigma concept should be used if there are processes that generate lot of negative customer feedback whether customer is internal or external. The components of six sigma should be considered as means to study and rectify the problems.

C) Total Quality Management (TQM)

TQM is the integration of all functions and processes within an organization in order to achieve continuous improvements in quality of goods and services. The goal is customer satisfaction. Three quality Gurus named as Deming, Juran and Philips Crosby defined quality in their own concepts but following are commonalities:

- Inspection is never answer to quality improvement nor is "Policing".
- Involvement of leadership and top management is essential.
- A program for quality requires organization wide efforts and long-term commitment.
- Quality is first and schedules are second.

The quality can be defined through five different approaches i.e. transcendent, product based, user-based, manufacturing-based and value-based. To achieve these standards leaders should be committed and knowledgeable with missionary zeal to pursue aggressive targets so the cost of quality can be in the form of prevention, appraisal, internal and external failures but when we use TQM tools, we achieve greater customer loyalty, higher stock prices, reduced service calls and greater productivity. In short, quality begets customers and customers beget quality.

D) Quality Assurance in Higher Education

Quality in education is multi-faceted, multi-dimensional, complex but a positive concept because quality is always measured against pre-defined criteria's and standards, otherwise it will vary from person to person.

Quality in education is implemented to ensure that university standards, processes and procedures are appropriate and effectively implemented. HEC has laid down eight criteria's for enhancement of learning at higher level. This system is based on hypothesis that everyone in institute has responsibility for maintaining and enhancing the quality of students. The Quality Assurance program of HEC comprises of three main components:

- Development of criteria and standards for various quality

parameters in higher education.

- Development of processes and capacity building to ensure implementation of these criteria's.
 - To develop a system to arrange regular internal and external audit.
- University has already established Quality Assurance system to implement criteria's and standards and developed self-assessment report at each department. Training sessions are regularly organized to build capacity of faculty members and staff. Internal assessments are conducted to identify weaknesses and recommend remedial measures. We can say Higher education is at cross roads, at one end there is high demand for access to higher education and at other quality is questioned. In order to survive in competitive world of globalization universities must pay attention to quality.

Surveys Conducted

HEC has laid down criteria's and standards for enhancement of higher education quality in HEI's. Accordingly, standardized feedback forms were designed by HEC for faculty members and students to get feedback for improvement. Air University automated all ten proforma's to facilitate teachers and students to get feedback on line. A dedicated team of automation department, placement office and QEC worked jointly to streamline data processing and analysis templates. The team has optimally utilized existing human resources. Faculty members and students feedback surveys have been completed successfully at university. The class advisors and department co-coordinators played pivotal role in success of these surveys. Moreover, this exercise was not just gathering information but an effort to promote quality processes and improvement in overall educational system. The analysis of Students course curriculum and teacher's evaluation data has been sent to HEC and Chair departments for remedial measures.

Honors and Awards

Following faculty members have been awarded with letter of appreciation by the Vice Chancellor for their devotion to duty and positive attitude towards work for writing Self-Assessment Reports at their departments.



Dr. Wasima Shehzad
Department of
Humanities



Ms. Sara Bano
Department of
Humanities



Ms. Fazaila Qazi
Business Admin.



M. Rukunuddin
Department of
Mechatronics



Ms. Maryam Zareef
DMAE

Achievement of 'W' Category

Quality Enhancement cell was established in Oct2010 and started to function in Jan 2011. HEC conducted annual quantitative assessment for categorization of QECs based upon their performance in enhancing quality of education at their universities. Air University QEC scored 85 marks on the scale of 100 and was placed in highest category of "W".