Concepts of 'Quality'

'Quality' is a much-debated term. To some it is like 'beauty' that lies in the eye of the beholder! Those who believe in this are 'relativists', whereas those who believe quality can be specific attributes that can be identified, they are 'objectivists'. The word quality comes from the Latin word *qualis* meaning 'what kind of'. With a variety of meanings and connotations, it has been referred to as a 'slippery concept' (Pfeffer and Coote, 1991). To illustrate the slippery and elusive nature of quality and the confusion associated with it many authors (Nigvekar, 1996; Warren *et al*, 1994; Sallis, 1996) have referred to the highly cited words of Pirsig (1974).

> Quality ... you know what it is, yet you don't know what it is. But that's self-contradictory. But some things *are* better than others, that is, they have more quality. But when you try to say what the quality is, apart from the things that have it, it all goes *poof*! There's nothing to talk about it. But if you can't say what Quality is, how do you know what it is, or how do you know that it even exists? If no one knows what it is, then for all practical purposes, it doesn't exist at all. But for all practical purposes it really *does* exist... So round and round you go, spinning mental wheels and nowhere finding anyplace to get traction. What the hell is Quality? What is it? (p. 171).

This implies that quality means different things to different people.

Defining Quality

The British Standard Institution (BSI) defines quality as "the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs" (BSI, 1991). Green and Harvey (1993) identified five different approaches to defining quality:

*   in terms of *exceptional* (exceeding high standards and passing a required standard);

*   in terms of *consistency* (exhibited through "zero defects" and "getting right the first time", making quality a culture);

*   as *fitness for purpose* (meaning the product or service meets the stated purpose, customer specifications and satisfaction);

- as *value for money* (through efficiency and effectiveness); and

- as *transformative* (in term of qualitative change).

These different notions of quality have led Reeves and Bednar (1994) to conclude "...The search for a universal definition of quality and a statement of law like relationship has been unsuccessful". According to Gummesson (1990) it might be useful to create an insight into the many dimensions that form a fuzzy entity referred to as quality through social consensus rather than defining it. Garvin (1988) classified the various definitions of quality into five major groups:

(1) *Transcendent definitions.* These definitions are subjective and personal. They are eternal but go beyond measurement and logical description. They are related to concepts such as beauty and love.

(2) *Product-based definitions.* Quality is seen as a measurable variable. The basis for measurement is objective attributes of the product.

(3) *User-based definitions.* Quality is a means for customer satisfaction. This makes these definitions individual and partly subjective.

(4) *Manufacturing-based definitions.* Quality is seen as conformance to requirements and specifications.

(5) *Value-based definitions.* These definitions define quality in relation to costs. Quality is seen as providing good value for costs (Largosen *et al*, 2004).

Why Worry about Quality?

As teachers, principals, heads of departments and planners and policy makers in education, you may be having this question in your mind – why worry about quality? It is not just because of the UGC directive that you should think of quality, rather quality should be a bottom-up approach and every one should be conscious of why we should worry about quality of our teaching, programmes and institutions. Some of the reasons are:

1. *Competition*: We are entering a new regime, where competition among educational institutions for students and funds will be highly significant. With globalization and the GATS (Global Agreement on Trade in Services), the educational environment will be seized by increased competition. In order to survive in such a situation, educational institutions need to worry about their quality.

2. *Customer satisfaction*: Students, parents or sponsoring agencies as customers of the educational institutions are now highly conscious of their rights or getting value for their money and time spent. They are now demanding good quality teaching and receiving employable skill sets, and thus we should constantly worry about the relevance of our courses and programmes to the needs of the labour market.

3. *Maintaining standards*: As educational institutions, we are always concerned about setting our own standard and maintaining it continuously year after year. In order to maintain the standard, we should consciously make efforts to improve quality of the educational transactions as well as the educational provisions and facilities.

4. *Accountability*: Every institution is accountable to its stakeholders in terms of the funds (public or private) used on it. Concern for quality will ensure accountability of the funds utilised and inform the stakeholders about taking appropriate decisions. Thus, quality can be considered as a monitoring mechanism.

5. *Improve employee morale and motivation*: Your concern for quality as an institution will improve the morale and motivation of the staff in performing their duties and responsibilities. If a quality system is in place, the internal processes would be systematic making every department complementing each others service domain and helping in developing internal customer satisfaction leading to high morale and motivation.

6. *Credibility, prestige and status*: If you are concerned about quality, continuously and not once in a while, it will bring in credibility to individuals and your institution because of consistency leading to practice, status and brand value.

7. *Image and visibility*: Quality institutions have the capacity to attract better stakeholder support, like getting merited students from far and near, increased donations/ grants from philanthropists/ funding agencies and higher employer interest for easy placement of graduates.

The chronology of quality movement

Pre-1900	Quality as an integral element of craftsmanship
1900-1920	Quality control by foreman
1920-1940	Inspection-based quality control
1940-1960	Statistical process control
1960-1980	Quality assurance/total quality control (the quality department)
1980-1990	Total quality management
1990-Present	TQM, the culture of continuous improvement, organization-wide quality management

Source: Sallis (1996).

Hierarchy of quality management

Total Quality Management	- Involves supplier and customers - Aims for continuous improvements - Concerns products and processes - Responsibility with all workers - Delivered through team work
Quality Assurance	- Use of statistical process control - Emphasis on prevention - External accreditation - Delegated involvement - Audit of quality systems - Cause and effects analysis
Quality Control	- Concerned with product testing - Responsibility with supervisors - Limited quality criteria - Some self-inspection - Paper based system
Inspection	- Post production review - Re-working - Rejection - Control of workforce - Limited to physical products

Source: Dale and Plunkett (1980).

Leading Thinkers on Quality

Three of the most important contributors to the evolution of the quality movement are W. Edwards Deming, Joseph Juran, and Philip B. Crosby. Though all three of them have concentrated on quality in the industrial and manufacturing sector, discussion on quality is incomplete without exploring their philosophies. Their contributions can also be applied to other sectors, including education. As students of education, we should strive to extract the best of each of these thinkers and apply them in our own context. Our focus here is on these three gurus of quality.

W. Edwards Deming

Deming is regarded as the father of quality movement.

Deming's 14 point philosophy

1. Create constancy of purpose for improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs.
2. Adopt the new philosophy. Organization can no longer compete if they continue in the old way of accepting delays, mistakes and defects. They have to make the required shift and adopt new ways of working.
3. Cease dependence on mass inspection to achieve quality. Instead of inspection at the end, staff should be trained to monitor and develop their own quality.
4. End the practice of awarding business on the basis of price tag alone.
5. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus to constantly decrease costs.
6. Institute training on the job. Failure to use the available talent in the organization is a greatest waste. Training is a powerful tool to improve quality.
7. Institute leadership. Management must lead by example and not just supervise. Leadership should help people to do a job better.
8. Drive out fear, so that everyone may work effectively for the company.
9. Break down the barriers between departments.
10. Eliminate slogans, exhortations, and targets, asking for new levels of productivity without providing the workforce with the methods to do the job better.
11. Eliminate work standards that prescribe numerical quotas.
12. Remove the barriers that rob people of their right to pride of workmanship. This is to remove the appraisal system that encourages competition among staff.
13. Institute a vigorous programme of education and self-improvement.
14. Put everyone in the company to work to accomplish the transformation.

Joseph Juran

Juran defined quality as 'fitness for purpose'. According to him, a product or service can meet its specification and yet not be fit for its purpose. The specification may be faulty and thus the specification should be what the customer wants. He identified three steps to quality improvement:

1. Structural annual improvement plans.

2. Training for the whole organization.

3. Quality directed leadership.

Juran's quality improvement steps

1. Create awareness of the need and opportunity for improvement.
2. Set explicit goals for improvement.
3. Create an organizational structure to drive the improvement process.
4. Provide appropriate training.
5. Adopt a project approach to problem solving.
6. Identify and report progress.
7. Recognise and reinforce success.
8. Communicate results.
9. Keep records of changes.
10. Build an annual improvement cycle into all company processes.

Philip B. Crosby

Crosby is probably the most influential management thinker in United States and Europe in the field of quality. He focuses on the senior management, and has given two popular statements – "Quality is Free" and "Zero defects". According to him quality is:

- Not goodness or luxury

- Not intangible

- Not unaffordable

- Does not originate in the workers

- Originates in the quality department

Crosby is best known for his four absolutes of quality management (Crosby, 1984):

1. The definition of quality is conformance to customer requirements.

2. The system to reach quality is prevention and not detection.

3. The standard of performance is zero defects.

4. The measurement of quality is the price of non-conformance.

The quality management of Crosby can be listed in 14 steps

Crosby's Fourteen Steps

1. Management should be convinced of the need for quality improvement, and there should be full commitment.
2. Set up a quality team to drive the programme.
3. Introduce quality management procedures.
4. Define and apply the principle of the cost of quality.
5. Institute a quality awareness programme.
6. Introduce corrective action procedures.
7. Plan for the implementation of zero defects.
8. Implement supervisory training.
9. Announce zero defects day to launch the process.
10. Set goals to bring about action.
11. Set up employee-management communications systems.
12. Recognise those who have actively participated.
13. Set up quality councils to sustain the process.
14. Do it all over again.

Implications for Higher Education

Deming, Juran and Crosby may be given the credit for developing the vocabulary on quality management. Higher education institutions can learn a great deal from these ideas. We can summarize a few points as:

1. Leadership and commitment of top management plays a significant role in quality improvement.

2. Creating an environment for learning and staff development is crucial to do tasks right every time.

3. Adopt new philosophies and technologies that can improve the quality.

4. Encourage teamwork and participatory management.

5. Develop a communication strategy to report progress and results.

6. Recognize the efforts of staff without creating a competitive environment.

7. Put appropriate systems and processes in place as per the needs of the stakeholders.

8. Encourage quality circles and a culture of quality.

Quality dimensions in higher education

Dimensions	Characteristics
Tangibles	Sufficient equipment/facilities Modern equipment/facilities Ease of access Visually appealing environment Support services (accommodation, sports…)
Competence	Sufficient (academic) staff Theoretical knowledge, qualifications Practical knowledge Up to date Teaching expertise, communication.
Attitude	Understanding students' needs Willingness to help Availability for guidance and advice Giving personal attention Emotional, courtesy
Content	Relevance of curriculum to the future jobs of students Effectiveness Containing primary knowledge/skills Completeness, use of computers Communication skills and team working Flexibility of knowledge, being cross-disciplinary
Delivery	Effective presentation Sequencing, timeliness ConsistencyFairness of examinations Feedback from students Encouraging students
Reliability	Trustworthiness Giving valid award Keeping promises, match to the goals Handling complaints, solving problems

Source: Owlia and Aspinwall (1996)

How can Quality be Assessed?

- Self evaluation;

- Peer review by a panel of experts, usually including at least some external panel members and one or more site visits;

- Analysis of statistical information and/or use of performance indicators or the best practices benchmarking;

- Surveys of students, graduates, employers, professional bodies;

- Testing the knowledge, skills and competencies of students (Harman, 1998).

- Identifying pre-determined criteria for assessment;

- Preparation and submission of the self-study report by the unit of assessment;

- On-site visit of the peer team for validation of the report and recommendation of the assessment outcome

- Final decision by the Executive Committee

(Source: Quality Assurance in Higher Education- An Introduction by Dr. Sanjaya Mishra)