

Quality Circle- A Management Tool For Quality In Higher Education Institutes**Dr. Shrikant N. Dhage,**Associate Professor & I/c Director, D. B. Institute of Management & Research,
Mahalangra, Tq. Chakur, Dist. Latur-413513, India.**Abstract**

This paper discusses about the need of quality improvement in higher education institution. Here the focus is also given on understanding the internal quality assurance, quality assurance process and quality assurance in Indian context. The major aim of this paper is to discuss on improvement in quality and problem solving in higher education institutions by the use of management tool "Quality Circle". While making discussion on quality circle, focus is given on organization structure of quality circle, issues in higher education which can be handled by quality circle and techniques of quality circle which can be used to increase the quality of higher education. Lastly suggestions are given on how to implement quality circles in higher education institutions which may help students, teachers and higher education institutions to improve the quality in higher education.

Introduction

Higher education plays very important role in society. Higher education is the source or feeder system in all walks of life and therefore supplies the much needed human resources in management, planning, design, teaching and research. Scientific and technological advancement and economic growth of a country are as dependent of the higher education system as they are on the working class. Development of indigenous technology and capabilities in agriculture, food security and other industrial areas are possible because of our world class higher education infrastructure. Higher education also provides opportunities for life long learning, allowing people to upgrade their knowledge and skills from time to time based on the societal needs.

In brief, we can say that higher education is the backbone of any society. It is the quality of education that decides the quality of human resources in a country. Higher education is a complex system facilitating teaching, research, extension and international cooperation and understanding. Thus the quality assurance in higher education is the need of the hour. [1] Therefore this paper is focused on discussion about solving the problems of students, teachers and other academicians to

improve the quality in higher education with the help of the innovative management tool "Quality Circle"

Objectives Of The Present Paper

The important objectives of the present paper which covers quality circle- a management tool in higher education are:

1. To understand the quality assurance need in higher education institutions.
2. To know about the internal quality assurance system, quality assurance process and quality circle in higher education.
3. To understand about the quality circle structure, issues in higher education where it can be applied and to know the techniques of quality circle which can solve the problems in higher education.
4. To suggest how to implement the quality circle in higher education institutions.

Content**I] Internal Quality Assurance System**

Quality is defined as 'the fitness to use and conformance to requirement' (Juran, 1996) [2]
'A predictable degree of uniformity and dependability at low cost and suited to the market' (Deming, 1986) [3]

'The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs' (American Society for Quality Control, 1990) [4]

‘A perception arising as a consequence of how well a company meets all explicit and implicit promises made to a stakeholder.’ (Feigenbaum, 1995) [5]

‘A function of competencies in terms of knowledge, skills and attitudes, capacity and competition vis-a-vis needs.’ (Goel and Biswal, 1996) [6]

‘Product or service possesses quality if it helps somebody and enjoys a good and sustainable market’ (Deming, 1997) [7]

‘Resultant from the system that produced it, and is an attribute of that system as much as of the product itself— of its processes, its people and the way they work together.’ (Holt, 1998) [8]

‘Efficiency in meeting the set goals, relevance to human and environmental needs and conditions and "something more" in relation to the pursuit of excellence and human betterment.’ (Rajput and Walia, 1997) [9]

Thus, Quality is skill, excellence, perfection, standard, competence for work and value for money. It is further defined as combination of competence with virtue, excellence in performance and capability of delivering goods.

An Internal Quality Assurance system is a system under which students, staff and management satisfy themselves that control mechanisms are working to maintain and enhance the quality. In the specific context of higher education institutions, IQA is the totality of systems, resources and information devoted to setting up, maintaining and improving the quality and standards of teaching, scholarship (student learning experience), research, and service to community.

II] Quality Assurance Processes

The processes may have the following elements:

- Quality assurance of student assessments
- Quality assurance of staff
- Quality assurance of facilities
- Quality assurance of student support
- Specific Instruments for Quality Assurance

The following special instruments may be used periodically and mostly combined with external assessment.

- SWOT analyses
- Inter-collegial audits

- Information system
- Quality handbook

The AUN-QA has formulated criteria for IQA. These requirements are in line with the requirements formulated by the European Association for Quality Assurance (ENQA). A institution must have:

- a clear policy for IQA and clear procedures for it;
- an adequate system for the approval, monitoring and periodic review of programmes and awards;
- an adequate system for the assessment of students
- an adequate system for the quality assurance of teachers
- an adequate system for the quality assurance of learning resources and student support;
- an adequate information system;

III] Quality Circles In Higher Education

Higher Education system does not function in vacuum but is a part of the larger social system. Policy changes like liberalization and privatization have their impact on education system. And then, with the globalization of the economy, can education be far behind?. 'The transition to 'one world' is a painful process, for the vital question is who gets integrated into whom. Obviously, the weaker gets subsumed into the stronger....'. Hence, there is a crucial need for introspection. With the foreign universities opening more and more centers in India coupled with aggressive marketing strategies, Indian education can only retain its identity and integrity if it can provide a world-class quality of education.

Quality Circle is an integrated system constituting small groups of people from same or similar work areas, who voluntarily offer to meet in order to identify, analyze and solve problems, which may lead to improvement in their total performance and enrichment of their work life. Another source defines as “a Quality Circle is composed of a small group of employees who genuinely care about others,

preferably doing similar work, meeting voluntarily with a leader on a regular basis, to identify problems, analyze the causes, recommend their solutions to management and wherever possible, implement solutions.” Quality circles in industry have been known to increase productivity, improve quality, boost employee morale, and serve as a human resource development tool; these same benefits may be accrued in higher education. In fact, quality circles in community colleges have been used to solve problems in administrative developments [11] [12], and in student support services [11] [10].

The Quality Circle organization has a four-tier structure, consisting of

- a) Members
- b) Leaders
- c) Facilitators
- d) Steering committee

Each circle has a *leader* preferably from amongst its members, a senior staff or from the management. Extensive training is provided to circle leaders so as to make them effective in initiating, guiding and controlling the circle activities. They must be familiar with their responsibilities and should know how to identify problems, analyze them and find solutions. *Facilitators* are from a senior level in the hierarchy who liaise and co-ordinate the work of different circles under their control. Usually, three to four circles are allotted to each facilitator. They act as guides and catalysts for the circles and they stimulate the members to work together. The *steering committee* is the apex body, comprising of departmental heads headed by the management representative. This committee overviews the work of all the circles and acts as a focal point for their planning and operation. The steering committee meets periodically to study the reports received from different circles or from their facilitators and the latter keep in touch with the members of the committee.

Quality in higher education can be ensured through the technique “Quality Circle”

which has been successfully implemented in manufacturing industries. In educational institutions, the quality circles on various areas can be formed, so as to enrich the Indian Higher Education to International standard.

A] Quality Assurance Department

There may be a separate department such as Quality Assurance Department or Quality Management Department formed for coordinating the various circles, selecting leaders, convening circle meetings, arranging training for members and obtaining other inputs from outside to prepare circles for solving problems, and arranging presentations of reports for the approval and implementation of management.

B] The Thrust Areas

The various key issues on which the circles may be formed as far as any higher educational institution is concerned are:

- a) Teaching & Learning in small groups
- b) Infrastructure maintenance and its optimum use
- c) Use of ICT
- d) Faculty development
- e) Course Curricula review
- f) Students academic Excellency - Subject knowledge, General knowledge and soft skills
- g) Students co-curricular activities
- h) Students extra curricular activities
- i) Students Assessment
- j) Placements and Employability
- k) Out reach and Extension Programs
- l) CSR activities (Community and Social Responsibilities)
- m) Counseling and Grievance handling
- n) Doctoral and Post Doctoral Research and Publication
- o) Faculty members Consultancy

C] Techniques For Problem Solving In Quality Circles

The following techniques are commonly used by members of quality circles during their meetings for problem solving sessions. The member should be adequately trained on the use

of these techniques when the circle activities are started.

- i) Data or information collection
- ii) Brain storming
- iii) Cause and effect analysis
- iv) Pareto diagrams
- v) Control charts
- vi) Flow diagram and process flow chart.

D]Characteristics And Approaches Of Quality Circle In Higher Education Institutions

Following table 1 depicts the characteristics of a Quality Institution and an Ordinary Institution which clearly states that higher education institute need to have quality improvement system. [13]

Quality Institution	Ordinary Institution
<ul style="list-style-type: none"> • Customer centered • Focused on preventing problems • Invest in people • Treat complaints as an opportunity to learn • Have well defined quality characteristics for all areas of the organization • Senior management process involves everybody • Have collective performances and responsibility • Concurrent performance appraisal • Flexible planning • Have egalitarian culture • Plans are long term • Quality is seen as a part of the culture 	<ul style="list-style-type: none"> • Centered on internal needs • Focused on detecting problems • No systematic approach to staff development • Treat complaints as nuisance is vague about standard of quality • Have no quality plan • Only the management team is involved • Have individual responsibility • Retrospective performance appraisal • Rigid planning • Have hierarchical culture • Plans are short term • Quality is seen as a troublesome initiative

Table 1. Characteristics of a Quality Institution and an Ordinary Institution

Following table 2 clear us about when Quality circle work and when quality circle will not work in higher education institutions. [13]

Table 2. Can QCs Work in Higher Education?

QCs will not work, if ...	QCs will work, when....
QCs are for solving managements' problems	QCs are for employees' growth and development
QCs in industries are for improving products but education has no products	Products of education (students) are equally important as industrial products. For the benefit of all, we must have QCs
QCs extract more work from sincere and simple people	QCs "empower" sincere and simple people
It is too much "talk" and less results.	If the concept is understood clearly.
It will breed few achievers and dump the rest.	It converts the average into high achievers who have "built in" rewards and motivate the rest to do their best
QC's are an endless agony of teams, meetings, seminars and reports.	It is the highest form of an individual's morphosis, a transition both on the personal front and at the work place.

Following table 3 shows how quality circle approach and traditional approach differs on teachers role, objectives to be achieved, instructional approach & other aspects in higher education institutions. [13]

Table 3 : The QC Approach vs The Traditional Approach

Dimension	QC Approach	Traditional Approach
Teacher's role	Personal, as a friend and guide	Impersonal and distant
Types of objectives to be achieved	Cognitive, emotional and value oriented	Stated and prescribed
Instructional approach	Discovering together and emphasis on	One-way, rigid, emphasis on

	learning by doing	rote learning
Relevance to life	Imparts usable, analytical & practical approach to problem at all fronts	Little
Making a difference	Problem solving in teams, so collective decisions and collective implementation	Each individual is an island. Even if there are good ideas they are not implemented

E]Advantages From Quality Circles

Some gains may be tangible, while others may be intangible but in the final analysis, it will lead to improved institutional performance, reduced wastage and lasting relations between the management and staff members. Some direct gains are enumerated below:

- a) Improves quality and productivity
- b) Promote job involvement and sense of participation
- c) Creates problem solving and problem-preventing attitude
- d) Develops creativity and innovative spirit
- e) Develops job satisfaction and hence less turnover of staff
- f) Inspires team work and develops harmonious relations.
- g) Achieves cost reduction and cost control
- h) Reduces human errors and system failures.

IV]How To Implement Quality Circles In Higher Education Institutions

Although quality circles have their roots in industry, quality circles have a promise as a pedagogical tool that makes students responsible for their own learning and increases class participation. Implementation of Quality Circles in Higher Education Academics sounds to be a very easy task, with emphasis on the following modules as a practice.

On the first day of the course, describe the purpose of the quality circle (to acquire continuous feedback for improving the course now and redesigning it for next year) and ask for three volunteers. Assure to meet every other week throughout the term. The time burden is modest: the discussions are limited to 30 minutes, and they usually follow a class meeting so travel time is minimal. The quality circle, its purpose, and the meeting schedule are also described in the syllabus. When the quality circle first meets, it is required to note that giving and getting feedback are learned skills on both sides, and that the members would have to self-consciously work to get it right. If the students make the Facilitator, the teacher, feel defensive, it is required not to get their message in record.

It is also required to make an announcement that the student volunteers to the entire class at the next meeting, suggesting that complaints can be safely channeled through them. QC members often take the initiative to sound out their classmates before and after class. As a pre-preparation, the members should have even e-mailed/ intimated all of their fellow students just before a QC meeting to take complete stock.

At the meet, it is also required to provide the quality circle members with an extract of the course syllabus covering the past two weeks. Which topics, readings, and cases, to ask, worked, and which didn't and why? Some topics are not well connected with the thrust of the course, one may access. Some modules appear too old and too boring. On the flip side, some may work extremely well, clearly "keepers" for the following year.

In all this as a practice, there may one conclude of some annoying tendencies, which may irritate the class. Among the answers received may feature as failure to call on students in the corners of the classroom, the occasional mistake of repeating oneself, insufficient clarity on the main points of a topic presented, and failure to summarize the day's

key lessons. The constructive criticisms are the stuff of a learning curve that the numerical ratings and written comments had never before provided.

As a part of the next modeling step, the hardest step is to have the quality circle members report briefly to the entire class at the next course meeting. This requires that the facilitator teacher should stand at the front of the room while his mistakes are publicly described. Not only this, the strengths also come out in the QC discussion, but the tests and practical experiences reveal that it is more so over a true explanation that the students are often reluctant to offer much open praise in front of the entire class for fear of classmate criticism.

After the QC members have finished their report, which only requires 2 or 3 minutes, the facilitator tends to offer his own assessment and report what changes as per the self assessment in making or not making in response to their suggestions.

This sums up the story of a conduct of a Quality Circle and its practice.

Participants or the group members of the concerned course are the blossoming tablets of the future managers or individuals of professional approach, and hence this has to have the conduct of this tool of quality an indispensable approach towards any teaching environment.

Confirming that effective information sharing is a learned skill, during the entire problem solving approaches in order to make the best use of the time, the course syllabus and the tools inclusive of the multimedia libraries, on-line Internet technologies and available resources for expertise generation among the takers of the course in the most exploited manner ever possible. The facilitators may have exited from several quality circle meetings with them thinking they had found little wrong with the course.

In a nutshell, the capsules of the manipulation and conduct of the operation in

regard to the Quality Circle practice has the following formats to laminate:

- Three volunteers are requested on the first class day.
- Pre-schedule frequent but short meetings in the syllabus (every other week for 30 minutes).
- Announce QC members to the class once the QC is formed and before each QC meeting.
- Ask QC members to canvass students for feedback before QC meeting (e-mail is useful here).
- Present copies of the syllabus or excerpts from it to QC members at the start of meetings.
- Review how to give and receive feedback at the first meeting.

Focus discussion on: classroom ecology, course readings, problematic students, cases & exercises, evaluation & grading, course topics, your communication, course assignments, clarity of instructions, classroom culture, your movement, exams and projects.

At the next course meeting, QC members and the facilitator make brief reports on feedback & actions. Supplement QC meetings with frequent informal discussions or canvassing of QC members. Use the final QC meeting to review the course & syllabus to revise for next year. Finally access the outcome of the circle operations as a part of the result. Make the presentation before the management i.e. the principal or the incharge teacher for implementation of the steps derived by the circle research & study, for the abolition of the specified problem. If the topic of study pertains to the course expertise, the same may be applicable to the next batch of study for the same module. [14]

Conclusion

Globalization has created a global market place for students and scholars. Globalization has resulted in massive expansion of higher education especially in the developing world. Universities and institutions of higher education have to produce graduates for the

global market requiring content, method and structure meeting international norms. Indian higher education is widely recognized and respected across the globe. The educational institutions have to take care of providing quality education which should be in par with the international standards. Higher education is at the cross roads. At one end there is high demand for access to higher education, and at the other the quality is questioned. In order to survive in the competitive world of globalisation, all higher education institutions should pay special attention to quality in higher education. By making their respective Quality Circles more efficient and effective every educational institution can get optimum benefits in ensuring quality in education.

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