# TQM IN HIGHER EDUCATION –A CASE STUDY OF ENGINEERING COLLEGES

**Dr.M.Ravikumar**
*Asst.Professor, Department of Business Administration, Sir Theagaraya College, Chennai.*

**Abstract**
*There is change in Technical education, due to Globalization and communication era. A great deal of strategic planning, laying down of appropriate bench marks and goals are essential. Implementation of TQM techniques with transparencies in administrations, admission process ensuring proper matrices, continuous and close monitoring at all levels, will definitely will lead to the expected results. The implementation of TQM in engineering institutes elaborately injecting it, to all levels, with assurance of desired results, bridging the gap between expectations and outcome.*

**TQM in engineering education can be achieved by**
- Benchmarking in curriculum aspects, staff performances.
- Healthy practices and academic environment.
- Other than curriculum assignments as social commitment.
- Introducing self-discipline in all elements.
- Participation of Industry personnel for sharing hands on experience.
- Periodic restructuring of syllabi for needs of industries.
- Providing the best infrastructure facilities.
- Transparency in administration, coordination and teamwork.
- Monitoring of students through teacher Guardian scheme.
- Incentive provisions for best performers.
- Injecting awareness and accountability at all levels.
- Interdisciplinary active R&D consultancy cell.
- Participative management of all concerned.

*Key words: TQM, Infrastructure, Interdisciplinary, Management, Assignment, Awareness.*

## INTRODUCTION
TQM in Engineering Education is ensuring quality in imparting education to students, through the highly experienced and trained faculty, with great concern to satisfaction of state holders, producing engines to accept millennium challenges. The quality of students passed out also needs to be accepted globally by industries. A user based support, can be evolved, which can suite the growing needs of the line community and quickly deploy advanced information technologies. The quality infrastructure availability with unlimited free/open access must be provided to students without any blockage/reservations. The process must penetrate deeper to students, alumini, parents, teachers, society. This can achieve goals like public image elevation attracting meritorious students and faculty, Effective teaching learning process. Increasing levels of funding from industry and R&D agencies, involvement of industry personnel in imparting engineering education, emphasis on practical skills. The recent developments like video conferencing will replace thousands of lectures, travelling lakhs of kilometers by students/teachers, there by save fuels in tones, Global wealth; reduce pollution and lot of man hours. It provides knowledge based education.

## MEASURES FOR STUDENTS
As the title suggest TQM needs to be included in engineering colleges right from admission to results, at every stage and by all involved. The mind set up to that effect to be changed of students. Staff both teaching and non-teaching, even security guards/peons by proper brain storming. If there are no voluntary participation in this process by all elements at all levels, its effect will not be complete. During admission process, all the seats, in centralized process, Institutional level and in vacancy rounds should be strictly filled by meritorious students. Resident colleges are proved it to be the best option for students overall growth of students. Strict implementations of academics schedules need to be followed by teachers and ensured by HOD/Principals, with 100% attendance of students in all lectures and practicals.The lectures must be made more and more interesting by using latest teaching aids/tools such as PowerPoint presentation/Video conferencing/Question answer sessions. Also the multidimensional development of students is ensured encouraging them to participate in sports, co-curriculum and extracurricular activities by extending the proper guidance from skilled teachers available. Specific programs based on local to be arranged by the students to meet with other than syllabi/Curricula requirements such as Mahabharata Abhiyan/Computer Awareness for senior citizens/self maintenance /dependence by women etc. The class teacher should develop proper exchange of guidance, from clever students to below average students, as a moral responsibility. The

guidance must be extended to the students for exchange of their soft skills, communication skills, and interrelationship among the group, group discussion capabilities, and administrative skills to get better placements in good companies carving their career.

## MEASURES FOR FACULTY/STAFF

A best teacher is one, who creates interest of one's subject in students mind initiating proper thinking process sequentially. The involvement of students must fully be ensured, during conduct of practicals by individual attention and random data generation so that calculations are done individual by all the students, which enable them, perform well during University examination in practicals and orals. The faculty must be capable by giving them all facilities as per University/AICTE/State Directorate norms such as scales,allowances.All types of leave vacations, proper deputation to seminars/Conferences at all levels be ensures, keeping abreast of latest developments. The weightage be given to publication of books, presentation of papers in International/National Conferences/Journals. Conducting seminars/Conference in the departments/college. Delivery of keynote address /Invited lectures in other colleges/Chairing sessions, in seminars and conference etc. Revision of syllabi should be periodically done by involvement industrial personnel to cater their needs, without any personnel interests, Egos, Blocks by removing obsolete portion and adding recent developments. Updating of write ups by ensured periodicals/yearly for all subjects. Contributions of Faculty as a P.G.Teacher in Guiding M.E., Ph.D, students, evaluation of thesis of other Universities must be considered. The Research/Consultancy projects undertaken by the faculty.

## CONCLUSION
### Application of TQM will results in
1. Meeting the expectations of stake holders, Students/Parents/Industries and Authorities University, D.T.C. etc/Society/Nation/World.
2. Continuous improvisation in imparting Quality Education, with Timely Corrective Measures.
3. Efficient and Effective Teaching Learning Process.
4. Consistency in Improved Performance with inbuilt Higher Reliability.
5. Refined and tuned monitoring at all stages ensuring expected levels of Quality results, bridging the gap between expectations and outcome.
6. Achieving the Targets through Strategic stepped periodic approach and synchronization.
7. Best tem efforts, without reservations of all concerned and proper Motivation/Co-ordination.
8. Reward sharing and optimum use of Global Resourses.
9. .Education available at reduced cost for tailor made courses in large numbers.
10. Integrated quality to attain higher levels of performances.
11. Establishing a bond between Alumni, College and Present students.

## REFERENCES
1. Best Practices in Higher Education –Report of National Conference Organized by NACC –Nov.2004.
2. Stephen Grorge,Amold Weimerskirch."Total Quality Management Strategies and Techniques", New York,Chi Chester Wiley,1994.
3. Tayler W.A." Assuring the quality of Engineering Education –Issues of Effective's and the Ethics of Excellence" European Journal of Education,15(1),5-11,1997.