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Total Quality Leadership (TQL) in Engineering College of India: for Entrepreneurship Development

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1. Abstract

For the competitive environment, Quality Assurance (QA) has gained wide importance in industry and is generally being introduced and experimental in engineering college. However, educational system can't be treated as industry. But, there are similarities with respect to their sub-components. Each of these viewed, as a system consists of input, process, management, resource, output and feedback. Educational institution system is complex, as it involves human being as input and output from the system. Students are input and customer too.

Leadership is responsible for promoting commitment in a educational institution towards skill development. Leadership is not autocracy or democracy. The various management experts become a 'situation' leader by coordinating with staff about what kind of leadership they need through a diagnostic process of analyzing their students need.

Key Words: **Leadership, Maintainability, Quality, Quality Assurance, Reliability,**

2. Introduction:

Quality Assurance means, "All those planned and systematic actions necessary to provide adequate confidence that a product, process or service will satisfy given quality requirements". Due to the rapid growth of globalization process, this aspect assumes greater importance for India to the educational institutions and commitment of TQM for Total Quality Leadership development in the engineering college:

2.1. Search for challenging opportunities to change, grow, innovate and improve on the quality of education.

2.2. Experiment, take risk and learn from the mistakes from the teaching methods.

2.3. Have a great vision for the future.

2.4. Make others participate in the vision plan by convincing them.

2.5. Bring about collaboration by team building trust among teachers fraternities.

2.6. Strengthen others by sharing all relevant information and delegate authority whenever possible.

2.7. Set an example for others as teachers by behaving in ways that is suited to your responsibility.

2.8. Plan for small successes that can promote constant progress and bring about commitment.

2.9. Recognize individual contributions to the success of every project for the Quality of Education.

2.10. Celebrate team accomplishment and success regularly, etc.

3. Literacy Review:

Due to the LPG era, Vocational/Engineering education becomes a new mantra for skill development at the down of 21st century. This concept has adversely affected of the third world countries including India. So, most of the best institutions of today, prescribes the great book the Geeta as Management Guru, yoga- karmagu Kausalam (i.e. the skill of work is yoga) and Total Quality Circle (TQC) is being offered as a plausible answer.

Mahatma Gandhi, father of Nation pointed out that the education system should also lay greater emphasis on work and practice while learning. He said that every citizen should be educated and the education must be job oriented for a better world and in this regard, Gandhian ideas focus on experiment.

For Example: "Made in India"

You are a Dy. Manager (TV production) in a large private sector firm. The company imports components from Japan, Koreas and Singapore and assembles them in its Indian Factory and them exports the finished product. The most important overseas market for your TV sets is the West European for the company and is essential to offset the imports the

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company needs. Unless the company exports 50% of its production, it will not be eligible to source items from abroad.

In order to prevent the Japanese from cornering markets, many Europeans countries have placed restrictions on Japanese products. For your company to export to the lucrative German market, management has to certify that 75% of the contents of your TV sets are manufactured in India, and not just assembled using imported components and subsystems.

The most expensive part of a TV set is the color picture tube, which accounts for 40% of the cost of a set. For the last three years, your company has been trying to indigenize its production, but has not been successful in producing high quality color tubes in the required numbers at its Bangalore plants. The Japanese collaborator has been reluctant to transfer for technology and help you debug the various technical problems that crop up. This means that you have to continue to import the item from them. Consequently, the import content of your finished TV set is nearly 50%. Under German law, such products are subject to a very stiff tariff and would not be competitively priced.

The Managing director called you to his office to discuss the company's predicament. He is an old family friend. You come from the same village, and your families have known each other for may generations. In fact he "rescued" you from a dead end job in the public sector and you now earn more than five times what you did a few years back. During the course of the discussion, he casually suggest that you place an opaque " Made in India" sticker over the Made in Japan label on the picture tube. This should help the TV sets pass the cursory inspection conducted by the German authorities. The MD hints that if you cooperate, it is just a matter of time before you are promoted to the post of General manger (production). From there on, the sky is the limit as far as your career progression within the company concerned.

You return to the factory and verbally instruct the production supervisors to make sure that the "made in India" label is affixed on all color picture tubes.

This analysis helps us to assess the success and operation of our organization.

4. *Methodology*:

Total Quality Leadership in Engineering College in India is depending on commitment. Commitment is the foundation of an effective Total Quality Management (TQM) programme. However, the proper commitment and the best programme for Engineering College in India and for example, special reference to Secondary/Higher Secondary Levels i.e. Sarba Shiksa Abhijan as well as Madhyamik Shiksa Abhijan were fails to understand the level of commitment which is required an effective TQM programme.

Action planning is the key to success of the whole approach, if the management team fails to come up with a proper and planned approach to TQM, and if it not most probably not going to work properly. The team in charge or Head of the institutions of TQM can't formulate its own plan. It needs support and has to be properly guided through the various stages and activities which lead to the creation of a TQM culture. A critical path out ling the approach, the educational institutions can take is developed is First. During the next phase, the TQM personal as a teacher work closely with the head of the institutions need to assess the progress made.

There is also danger of this stage that the institutional Head as in charge of TQM programme may delegate their responsibilities to other lower in level to him. Being commitment to programme implementation is very important. If there is a failure to support the words with proper and committed actions, the other also will not be motivated to commit himself to the programme. If the Head of the educational institutions feels that it does not have the time or manpower to devote to the TQM programme towards TQL development , at this stage , it is similar to saying, " TQM is not my responsibilities ". However, If the Head of the institutions is really committed, then it should demonstrate this commitment by doing what it is telling others to do. The action of the leader affects the attitude of the followers. According to Kerch and Crutch a leader is primarily concerned with the problems of morale and it is his responsibility to increase and sustain group morale. The behavior of the leader affects the followers, more than the behavior of the followers could affect the leader. Leadership is a wholesome synthesis of personality and opportunity.

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Characteristics of Engineering College Head as Leadership Quality:

Characteristics	Ranking
Honesty:	**1**
Competence:	**2**
Forward-looking tendency:	**3**
Inspiration :	**4**
Intelligence :	**5**
Fair-mindedness :	**6**
Broad – mindedness :	**7**
Straight-forwardness:	**8**
Imagination :	**9**
Dependability :	**10**
Supportive tendency :	**11**
Courage :	**12**
Co-operative attitude :	**13**
Caring tendency :	**14**
Maturity :	**15**
Ambitious out look :	**16**
Determination :	**17**
Self Control :	**18**
Loyalty :	**19**
Independent approach :	**20**

Fig: 4(a) Characteristic of Leadership Quality:

Alternative area for Quality Improvement. CSF's are single focus statement in one sentence that concentrates on attainment of the vision. For example, a CSF's dealing with student could be, "our tops to student have granted us preferred excellent students".
The above statement is written in the present tense means that it has been fully achieved, the educational institutions are changes the statement from 10 students to say 15 students which sets a new and higher goal. If a critical Success Factor cannot be measured, then it is not a CSF at all. It should preferably be written so that

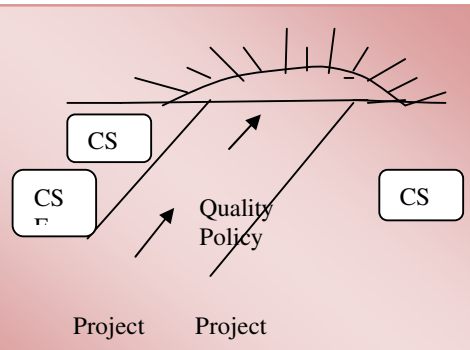

Fig: 4(b) the Road to Continuous Improvement

the measurement of it is easy. This is not normally so simple. The road to continuous quality improvement stretches into the middle distance, but the presence of the shorter term goals in the form of Critical Success factors allows checks to be made on progress. When changes to the plan are necessary, they can be made by the road with suitable projects to make the CSF's and vision come true.

5. Result & Discussion:

5.1. Total Quality Circle (TQC):

Total Quality Circle (TQC) is a group of activity and can't be done by individuals. It calls team work. TQC is not miracle drug; its properties are more like those of China herb medicine.

Quality Circle means, " It is a small group of teachers in the same work area or doing similar type of work who voluntarily meet regularly for about to identify , analyses and resolve work related problems, not only improve quality of education and total performance of engineering college".
A philosophy to contribute to the improvement and development of engineering college are consist by –

5.1.1. Teachers develop their ability, wisdom and creativity by using their brain.
5.1.2. Teachers educate themselves by sharing experienced.
5.1.3. Teachers do not work in isolation but act as them.
5.1.4. Display Human capabilities fully.
5.1.5. It promotes job involvement and participation etc.

Therefore, it is important if quality circles are to succeed in educational institution, that no situation is created by anybody, including, including teachers and staff as well as students also, which might antagonize non-members. In any work situation teachers have performance to involve non-members too in implementation of the solutions. It has therefore to be emphasized during the training of QC members as teachers and institutional head that every opportunity should be given to non-members to see for them the achievements and activities of Quality Circles and efforts must be made to tactfully involve them in implementation of solutions. A competent Head of Institutions therefore would invite non-members to come to Quality Circle meetings as well as to attend periodical case study presentations.

5.2. Organization Culture:

Organization culture, which is most important for promoting Total Quality Leadership as well as Total Quality Management. Because it is consisting by teachers feel free to contribute ideas and their involvement in problem solving and decision making. The formation of culture will depend upon a whole host of factors including history, organization structure, technology and

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environment. The four cultures he discusses are 'Power', 'Role' 'Task' and 'People'. The power culture reflects the concentration of power of a family owned business which can be either be large or small. The role culture has been typified as a Greek temple and focuses on bureaucracy. The task culture is prevalent in organization which is involved in research and development activities. The person culture is applicable to the consensus model of management where the individuals within the organization determine collectively the path which the organization takes.

6. Type of Data:

Some Important QC Tools:

761. DATA Collection:

6.1.1. What is data: Data is nothing but collection of facts and figures which gives a clear picture of work situation. It would form a sound basis for decision making and corrective actions. Following illustration will make it clear. Whenever a patient goes to a Doctor complaining about high fever, he would be asked to notice down the temperature at regular intervals, say once in six hours. Based on the trend of temperature recordings, doctor would diagnose the disease and prescribe the medicine, such temperature recordings at regular intervals are known as data. Based on the data alone, doctor prescribes the medicine. The same is true for organizational problems also. Generally, data is divided by two groups: Measurable date, One is measurable data like length, weight, time, etc and Countable data, Which cannot measure but can count.

6.1.2. Analysis of Data:

After data is collected, it is analyzed and information is extracted through the use of statistical methods. Decision making or further course of action should be based on analyzed data. Teachers should develop the habit of discussing a problem on the basis of the data and respecting the facts and shown by them. Sometimes lack of instruments or teachers power, difficulties in quantification etc, are common problems for the educational institutions.

7. CONCLUSION:

When speaking of "Quality" in educational institutions, one tends to think first in terms of product of Quality students. Nothing could be further from the truth. In TQC the first and foremost concern is with the quality of teachers. Instilling quality into teachers has always been fundamental to TQC. Therefore, allocation procedure of KAIZEN concept is critical, but this management approaches can change the cultural of educational institutions.

For example, Thichi Ohio, former Toyota Motor vice president, once gave the following example of finding the real cause of a machine stoppage:

Question 1: Why did the machine stop?
Answer 1: Because the fuse blew due to an overload?
Question2: Why was there an overload?
Answer 2: Because the bearing lubrication was inadequate.
Question 3: Why was the lubrication was inadequate?
Answer 3 : Because the lubrication pump was not functioning right.
Question 4 : Why wasn't the lubricating pump was not functioning right?
Answer 4 : Because the pump axle was worn out.
Question 5 : why was it worn out?
Answer 5: Because sludge got in.

By repeating "Why" five times, it was possible to identify the real cause and hence the real solution: attaching a strainer to the lubricating pump. If the workers had not gone through such repetitive questions, they might have settled with an intermediate counter measure, such as replacing the fuse. This problem is exacerbated by the fact that people who make the products and those who sell them are separate people. When the autoworker fails to tighten adequately, the consequences of his work may not be immediately apparent on the assembled car. What does it matter whether the bolt is tight enough or not / However, if the person working next on the car is thought of as a customer, the problem is personalized , and it does make a difference whether the bolt is tight enough or not.

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