

## TOTAL QUALITY MANAGEMENT IMPROVEMENT IN EDUCATION

P. Pandiarajan<sup>\*1</sup>, G. Balaji<sup>2</sup>

<sup>\*1</sup> Assistant Prof, Department of Mechanical Engineering, PSNA of College Engg and Tech., Dindigul

<sup>2</sup> Assistant Prof, Department of Mechanical Engineering, PSNA of College Engg and Tech., Dindigul

---

**Keywords:** TQM, Fish bone Diagram, Shewhart cycle, & Sipoc.

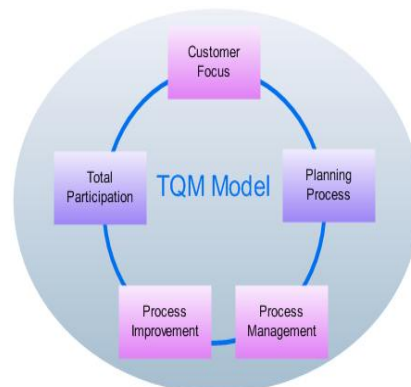
### ABSTRACT

The paper also reports on information designed to fulfill the needs of all users, ensuring that process changers identified in this project is successfully implemented and well accepted. The way in which this system encourages the students, staffs, and administrators with in the school to practice the new improved process as automatically as possible is discussed.

---

### INTRODUCTION

TQM is a philosophy and system for continuously improving service or products offered to the customer. it can help school or college provide better service to it is primary customers, students and employers. The continuous improvement focus of TQM Is fundamental way of fulfilling the accountability requirements common to educational reform



*Fig-1*

### ELEMENTS OF TQM IN EDUCATION

TQM school or college improvement teams and individuals are constantly working on improving service to customers.

- Awareness and commitment for everyone
- A clear mission
- A system planning approach
- Focus on master learning
- Management by measurements
- Development of student TQM skills
- A humanistic and a brain comfortable focus in the learning environment

#### Awareness and Commitment for Everyone

Linguistic, kinesthetic, visual and mathematical talents will not be developed to their fullest potential unless every member of a teaching, learning partnership promotes a highest possible quality at each step in Development process. The excellent way to begin is with a total staff meeting with parents and school board members participating.

A dynamic overview of TQM elements and potential more board and principal they are full support TQM efforts and that they do not presenters who have experienced both and a clear commitment from the school except “instant pudding”

**A Clear Mission**

Managing continuous movement toward progressively higher quality standards depends on defining those standards. TQM steering committee is formed in a school, it should Determine the answer to this questions does the school have a clear, customer –focused mission statement and a functioning process for departments translating this statement into exit outcomes for graduates. If the answer is “NO” that problem must be addressed with local, state, national, and employer standards. These standards should emphasize developing students. Abilities to solve real-life problems rather than just memorizing subject matter.

**A Systems Planning Approach**

Traditional education has become excessively compartmentalizes. Teacher X provides an English course. Science teacher Y might heavily on student’s knowledge of scientific principles without paying much PLANNING for instructional improvement in school and colleges. Subconsciously, the students’ begins to view English as course” instead of as skills to be used. If higher levels of student’s competence are to be developed, there must be higher levels of system-wide and cross-department Planning for instructional improvement in schools and colleges.

- Lack of system planning is a serious obstruction to higher quality In student learning.
- Compare this school-wide reading development plan in a middle school with what you know about narrower traditional remedial reading programs.

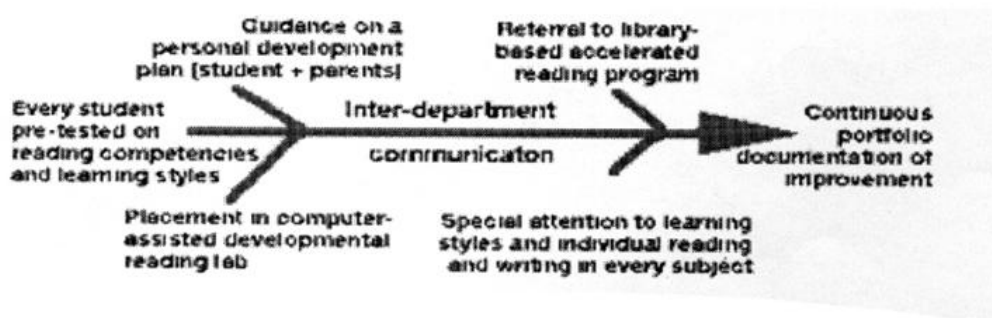


Fig-2

**Focus on Master Learning**

In traditional classroom teachers often follow this Sequence:

1. Plan.....2.Teach.....3.Test

The normal curve that usually results standards as Testimony to the fact that many students fail to learn at the highest possible level in this system. The TQM alternatives are,

1. Plan.....2.Teach(DO).....3.Check.....4.Revised teaching.....

In the “check: step, formative testing is used to determine which learning some students have missed. Then non-mastered material retaught in some different way or style. If advisable the checking and revised teaching can be repeated more than once.

This system of mastery learning can result in much more complete learning for most students, in effect, a positive movement of the “normal “curve. This improvement learning is a basic purpose of TQM in class room.

**Management by Measurements**

The introduced to an adapted shewhart cycle, a basic part of a TQM process. Be aware that measurement is very important in the marked steps of this cycle.



For example, if a reading teacher used a new computer program in the ACT step to assist students having trouble, he might gather data in steps #3 and #5 and plot in scatter diagram to investigate the relationship between the use of that program and final Learning results thusly. The new program promoted strong in reading that would affect planning for future instruction. This management by data rather by opinion allows objective pursuit of the two basic purposes of TQM in education.

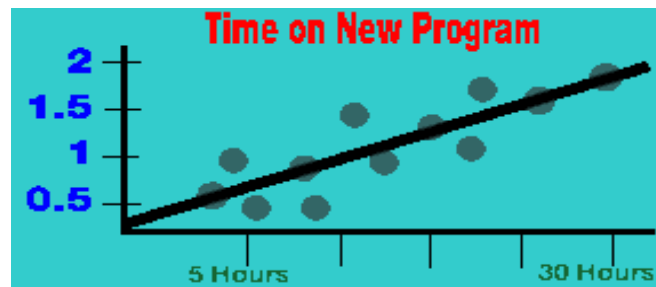


Fig-3

- Improved cost effectiveness.
- Improved learning

### Development of Student TQM Skills

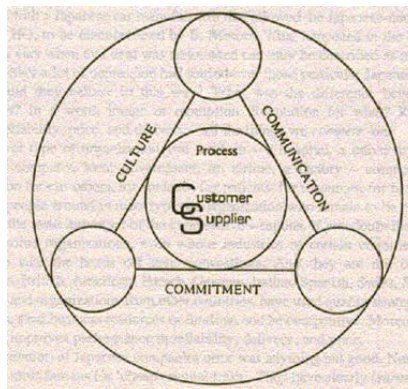
TQM to improve the learning in general every school district should specifically equip its students to understand and use TQM. This is a basic part of schools contributing to readiness for work in global economy. Whether a school staff indicated learning TQM into existing Courses or to provide it as a separate course, it is important that students DO and not just study about TQM. An excellent way to have students live TQM is to establish a system in which student assessment portfolios are dynamic records of constant improvement in which student can take great pride

### A Humanistic and Brain Comfortable Focus in the Learning Environment

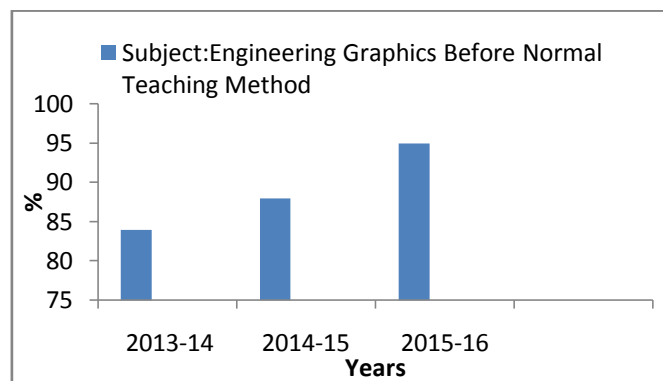
- It provides information's on six conditions for
- Quality School and college works.
- There must be a warm supportive learning environment
- Students should be asked to do only useful work
- Students should be asked to do the best can do
- Students should be asked to evaluate their own work and improve it.
- Quality work should always feel good.
- Quality work should never be destructive.

### SIPOC

S - SUPPLIER - PARENTS  
 I - INPUT - STUDENT  
 P - PROCESS - EDUCATION  
 O - OUTPUT - ENGINEER  
 C - CUSTOMER - SOCIETY

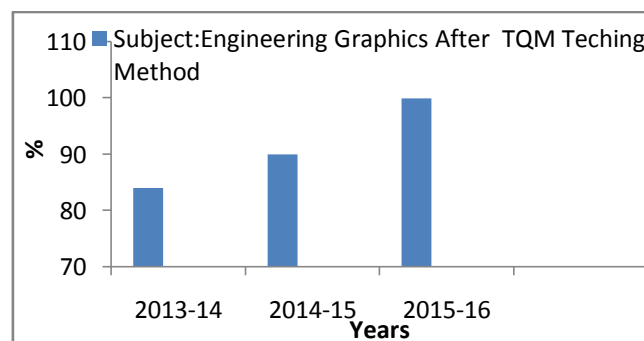


**RESULTS AND DISCUSSION**



*Fig-5*

In normal teaching method the student output has average level. The above figure5 and 6 represents student output percentage in the college. In this work engineering graphics paper has been analyzed for the last three years. The gradual enhancement have achieved after implementing TQM method.



*Fig-6*

From figure 5 the student percentage level varied from 84 to 95 % but student quality may varied because no systematic approach. In figure 6 the student percentage level varied from 86 to 100 % but student quality have improved because of TQM approach applied. Each year the % level gradually increased after certain period of year the output level enhanced maximum.



## International Journal OF Engineering Sciences & Management Research

### CONCLUSION

In the Paper, the traditional class room teaching Methodologies has been analysed, and the various Alternatives have been suggested to improve the Teaching methods by implementation various TQM Techniques and three by the improvement in the results Curve identified

### REFERENCES

1. *Mukhopadhyay Marmar, 2001. Total Quality Management in Education. Reviewed by Dr. Ramesh C. Sharma , Indira 2. Gandhi National ,India |*
2. *Pour Hadi Mohammad, and K. Yeshodhara Total Quality Management (TQM) in Education – Perception of Secondary School Teachers. 3. 2, Issue. 6, July 2012. | 12. WillaingGlasser, M. D. (1992). The Quality School teacher*
3. *Total Quality Management Applied to Schools Fred C. Lunenburg Sam Houston State University V- 2, Nov-2010*
4. *The Relationship between Level of Total Quality Management (TQM) and the Level of Culture of Teaching and Learning (COTL) in School P.g: 2249-9563 Vol. 2, No. 3, June 2012*
5. *Teacher Education and Total Quality Management (TQM) Ankit Chauhan1, Poonam Sharma2, P.g 2348-5396 Volume 2, Issue 2, March 2015*