ABSTRACT

In order for the United States economy to revitalize and survive in an intensively competitive international society, it has become imperative that the Total Quality Management (TQM) philosophy be adopted and fully implemented. One of the major tenets of this philosophy is personnel training. However, to date the majority of this training has been accomplished at the organizational level. Colleges and Universities have now become aware that to meet their mission effectively, TQM concepts with an emphasis on a global environment must be taught in the classroom.

INTEGRATION OF TOTAL QUALITY INTO THE BUSINESS CURRICULUM

Currently, corporate America is placing an increasing demand on the academic sector to assist in this massive TQM training and education process. Thus, the only way to adequately prepare students to be a global environment that is embracing TQM is to provide them with the tools of thought, with the ability to synthesize, and with a habit of contemplating the fundamentals and history of the various branches of TQM (Butterfield, 1991). The fundamental principle of curriculum design and development is that key courses as depicted in Figure 1 be integrated conceptually and methodologically.

This integration occurs whenever information and ideas from classes can be used as a foundation for discussions and assignments in other related classes. Core courses will cross-reference and reinforce each other to teach students how to synthesize information into knowledge. This approach to developing learning tools in TQM should produce graduates that are more suited to the global TQM environment in which they will work (Schaff, 1991). Discussion will now center on the Total Quality concepts that should be incorporated in these core courses.

Management Fundamentals

Course content includes planning, organizing, leading, control, employment cycle, organization design, and motivation. This foundation course enables students to contrast and compare classical management style with contemporary participative management and total quality management concepts and techniques. In addition, this course is the first core course that introduces the students to the concept of working in teams. The course includes team projects, team presentations, team testing, and peer evaluation. The value of an effective work group becomes quite clear very quickly in this learning experience.

Organizational Behavior

Course concepts include developing leadership potential, effective participation in group and organizational settings, gaining trust empowerment, influencing groups, relationships between management and labor, motivation, and TQM implementation in Japan versus the United States. This highly participative course requires team presentations, intensive research, and preparation of scholarly writing. It is designed to be a more intensive team building experience with such topics as conflict resolution, working with difficult people, and dealing with differing individual and team goals dealt with in much greater detail.

Operations Management

The content of this highly quantitative course includes applications of techniques in manufacturing and service organizations with emphasis on just in time inventory methods, cellular manufacturing, effective utilization of human resources, and quality management using Malcolm Baldrige criteria. Also linear programming techniques are employed to maximize the effective utilization of resources and queuing model are utilized to facilitate world class customer service.

Information Systems

Interface with information systems in technology-based training systems always adds value to the entire organization. In this course the students learn the value of systems design data base construction and administration, decision support systems, and expert systems. Focus is given on how information systems can be utilized to generate affordable efficient training and support in quality management concepts and implementation. In addition, the course deals with the complete CAD/CAM/CIM concept that affords effectiveness and efficiency in providing the market place with goods and services at a high level quality.

International Management

Course content includes identifying and solving problems that occur in a global environment. The impact of varying culture attitudes and values on quality aspects beyond traditional techniques, group processes related to Total Quality concepts, and the impact of varying culture attitudes and values on quality aspects of the product and/or service offered are examined from an international point of view. Differing work ethics, social values, political structures, geographical competitive advantage and other internationally related topics are covered utilizing the TQM philosophy.

Quantitative Methods

This course offers a heavy emphasis on statistical inference and interpretation. Measures of central tendency and dispersion along with correlation and regression techniques are presented. This course then applies these techniques to Statistical Process Control exposing the student to such TQM tenets as pareto charts, cause and effect relationships, and x-bar, r-bar, etc.

From the above discussion, it can be seen how these core courses are designed to cross-reference and reinforce the TQM philosophy. All courses include, to varying degrees, the utilization of experiential exercises and computer based simulations to emulate “real world” learning that can be readily transferred. Students are encouraged to become involved with the local community chapters of The American Production and Inventory Control Society, The American Society of Quality Control, and The American Society of Training and Development. Many local community practitioners are invited into these courses to speak to the students and tours of local organizations are a norm.

Thus, this TQM oriented curriculum not only provides class room learning of the TQM philosophy, it also affords students the opportunity to see and talk to practitioners employed by organizations that have adopted the TQM philosophy.

CONCLUSION

In essence, to regain its competitive edge in a global environment, the U.S. has discovered Demning and his Total Quality philosophy for the second time. However, corporate America can not achieve a Total Quality nation all by itself. Universities and colleges must play a major role in the training of our students in the Total Quality philosophy.