## Reenergizing Community College Education Through Total Quality Leadership

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The United States has a problem relating to the quality of its work force. Unless this nation becomes the best educated one in the world, it cannot maintain its economic superiority. This presents a challenge, however, since 85% of the work force of the year 2000 is already working. As a result, a major mission for this country's community/technical colleges is to develop retraining programs for business and industry.

Years ago, countries exploited their comparative advantage and only two things were important: natural resources and money. When the U.S. added another ingredient-universal free education-it became the richest and most productive country in the world. Soon this nation's companies were producing most of the world's manufactured goods, using a model developed by management specialist Fredrick Taylor. Henry Ford implemented this model in his plants, dividing larger tasks into smaller ones that people without any education could handle. All decision making was turned over to a group of foremen, supervisors, and managers. It worked so well that most organizations adopted the same hierarchical management model. Government, hospitals, agencies, churches, and schools all were organized with layers of responsibility and a cadre of managers who were selected because of their education, skill, and experience.

Meanwhile, General Douglas McArthur was leading an Allied occupation in Japan. He brought in American experts to teach the Japanese how to set up factories and improve production. Quality experts W. Edwards Deming and Joseph Juran taught statistically based systems of continuous improvement, and the Japanese soon found that the way to get quality was to design it into the product and reorganize the work unit. They found that by giving their workers responsibility, they could produce better products for less cost. Soon the Japanese became a major economic competitor of this country. While Deming and Juran taught the Japanese how to achieve quality, U.S. companies in the 1940s and 1950s didn't teach workers new forms of work organization. The assembly line approaches invented by Fredrick Taylor continued to be used. Since many countries were devastated by World War II, there was little outside competition. This resulted in an

increasingly high wage, low skill front-line work force. This country's education system also refused to change. Before long, as the new systems caught on in the Orient and elsewhere, fierce competition came into play from countries like Japan, Taiwan, Sweden, and West Germany. The U.S. was falling behind because it hadn't adopted the new system of work organization.

Today, however, this is beginning to change. A transformation is beginning in many U.S. countries and in education. Many progressive companies are transforming their cultures using new, advanced technology and different worker organization that recognize the importance of powerful human resource skills as prerequisites for increased production. The Fredrick Taylor hierarchical model is being disbanded in favor of new, flattened structures. These new technical and human skill requirements, changes in work organization, the integration of world economics, and market competition are indicators that during the 1990s and beyond, quality and productivity will remain a top priority, especially in business and industry. It is imperative the U.S. companies strive to attain the zero defect standards established in Japan and other countries. This quest for survival is fundamentally changing the way business is being done. What is emerging are various systems of management and operations that can best be described as Total Quality Leadership (TQL), Total Quality Management (TQM), or Continuous Quality Improvement (CQI). These new approaches mean that quality becomes a way of life in these organizations. They should not be viewed as just a quick fix or a series of management projects and they are much more than the use of quality circles and statistical process control. In these new environments, quality permeates all levels of the organization and becomes everyone's responsibility from the Board of Directors to the CEO and to personnel at the lowest levels of the organization. Total quality leadership is a very precise, comprehensive, and cultured transformation that is driven and supported by a strong organizational philosophy.

A TQL environment requires that focus be placed on empowerment, enablement, and shared decision making, and on coaching others to assume more responsibility. It more or less calls for a "hands-off" approach to management with emphasis on facilitation rather than directives. Total Quality Leadership calls for superb customer service—a specific process for identifying customers, gathering customer information, and responding to customer needs to exceed their expectations. It demands effective strategic planning using ideas from inside and

outside the organization. The internal and external information is brought together using planning and management process tools and methods such as Hoshin or breakthrough planning.

At Fox Valley Technical College in Appleton, Wisconsin, a new software planning process called TeamFocus<sup>TM</sup> is used to assist in planning, goal setting, and decision making. Progressive organizations are benchmarking the competition-analyzing other organizations that have displayed excellence and then putting systems in place to keep their own products and services competitive. This new system calls for an emphasis on prevention rather than inspection and on the use of self-managed teams as opposed to traditional forms of autocratic management. Total quality leadership requires a problem solving environment with the use of scientific methods and statistical approaches in a system defined as Process Management. Through this, one is always searching for ways to improve procedures for producing and distributing products and services. TOL requires greatly improved computer-based information systems and the sharing of organizational information with all team members-information that, in the past, was reserved only for a select few executives. In quality, every process generates data to improve it. In short, Total Quality Leadership requires a cultural revolution in the organization that tosses out the outdated, vertical bureaucratic charts with layers of management and flattens the company's entire structure. Such a revolution requires a new paradigm that is fostered by ongoing education and training for every employee. Finally, two fundamental requirements are integral to any quality improvement program: assessing costs and establishing indicators of success by which to measure the program's ongoing benefits. There must be a focus on accountability, and costing models must be in place to analyze costs associated with TQL and its impact on production and services.

In spite of all these features that are a part of the TQL movement, and all the successes that are apparent in organizations throughout the world, failures do occur. These can be categorized because of the same reasons that come up time and again. Organizations that have tried quality and failed were not successful largely because of these basic factors: lack of commitment (especially from the CEO and other senior executives), aversion to change by employees who resist new paradigms, poor initial planning, early expectations for positive results, lack of a road map (Deming says all models are wrong but some are useful), and inadequate indicators of

success.

To summarize this brief review of concepts, quality is a never ending journey on the road to excellence where excellence is the norm, rather than the exception, and customer satisfaction is the number one priority. Organizations are finding out that quality is only as good as the customer says it is—not what statistics and control charts say it should be.

What does this all mean for education? What can educators learn from this? Business successes clearly illustrate what must be done. Like business and industry, education, too, must change drastically. The spotlight is on this nation's schools as the last great hope for successfully dealing with the multitude of challenges facing it. Because of this, critics of education abound. It all started nine years ago when the best-seller, A Nation At Risk, warned of the rising tide of mediocrity in U.S. schools. That book and several others portray education as being in a sad state of affairs, and this ineffectiveness is undermining this nation's global competitiveness.

Reforms of all types are being tried to cope with these problems in education. In spite of numerous attempts, positive change has not occurred. While there are excellent educational systems in this country, people simply cannot be satisfied when:

- Almost 30% of students drop out before finishing high school (one dropout every 8 seconds). With minorities, it hits as high as 70% in some urban centers, and in colleges and universities, 40-60% of all freshmen do not attain their degrees.
- More than 40% of young adults have deficiencies in basic skills such as reading, writing, and mathematics (700,000 students who graduate can't read their diplomas). Because of this, there are millions of people in the workforce who do not have enough basic skills even to be trained in those new systems. An estimated 40 million workers need remedial upgrade training. In most community colleges, basic skills instruction is the largest department with up to 70% of all students needing remedial courses.
- Over 27 million Americans are illiterate—40% of New Yorkers are unable to read and comprehend *The New York Times*.
- U.S. students score consistently lower in achievement tests than most of the leading world economic countries. This country ranks between 8th and 11th among all nations.
- Business and industry are spending more than all of public education for retraining programs, with more and more private funds used to provide basic education.

With these statistics and the mounting challenges in education, people need a shared vision of what needs to be done—one that refocuses their thinking about the relationship between education and work. The changes required in education are being prescribed by techniques and concepts used in business and industry. The acceptance of that prescription is what has happened at Fox Valley Technical College (FVTC). It all began with input from business and industry.

In 1985, like many other community and technical colleges across the nation, FVTC was approached by a local businessman and was asked to provide training in quality and productivity. Like many others, FVTC accepted that challenge but, unlike other colleges, went one step further. The college asked itself this question: "If business and industry were looking to quality and productivity principles to improve themselves, couldn't an educational institution do the same?" The answer was a resounding "yes!" And so FVTC became the first public school in the country to implement a total quality process throughout its organization with management, faculty, and support staff all becoming involved. FVTC began practicing "what it preached" almost immediately. A dual system was developed that included training in quality for business and industry and implementation of a total quality process within the college. While FVTC began with a single theorist's step-by-step plan, its own model was soon developed—one that contains concepts found in theories by Deming, Juran, Crosby, Conrad, and Albrecht. FVTC's process now includes a sequential model, active quality committees, extensive training for all FVTC staff, an overhaul of several internal programs and systems, comprehensive employee-centered reorganization, and departmental and cross-functional problem solving teams.

FVTC has learned a lot during the past six years. Staff have found that the challenges they face in internal implementation of TQL are very similar to those of their business and industry counterparts. FVTC is not very different after all. The college has also learned that this process is a lifetime commitment—a cultural revolution. FVTC has learned that it was right in its original assumption; educational products and services can, in fact, be improved through the application of a quality theory.

It has been an exciting, painful, controversial, and challenging but wonderful experience that has been well worth the effort. The gradual integration of quality and productivity techniques into FVTC's everyday operations and management has

caused several things to happen. These can be summarized as the following quality components:

- 1. FVTC is using a 16-step process improvement model that is built on theories of several quality experts.
- 2. A Total Quality Leadership Team (TQLT), which is responsible for both college policies and governance as well as the quality improvement process, has been established. The team has members from faculty, management, and support staff. All are selected by their peers, with the exception of the college president who is a permanent member.
- 3. FVTC has defined its customers as being its students, employers, tax payers, and co-workers and strives to meet and exceed all of its customer's expectations.
- 4. The college has established nine college-wide committees to plan TQL education programs for staff, set up recognition programs, improve customer service, assist in measurement and costing, handle corrective action processes, and design research systems to monitor how well it's doing.
- 5. Orientation and awareness training have been provided in quality concepts and principles for the entire faculty, staff, and board of trustees. Currently, advanced training in process management, customer service, team building, problem solving, and teaching effectiveness is under way. In all, full-time employees receive 56 hours of mandatory training in quality and it's not over yet. A design team is working on the next level of training for the faculty and staff.
- 6. FVTC has designed and implemented a process to help define and solve problems using scientific methods and statistical approaches to control variation.
- 7. A guaranteed satisfaction has been implemented that includes refunds for any business or industry dissatisfied with customized training.
- 8. Free instruction and services are available to graduates who don't get jobs in program-related occupations.
- 9. FVTC provides retraining for graduates who do not have quality/productivity skills and technical competencies when they enter the world of work.
- 10. Quality elements have been defined as indicators of excellence in education with measurable standards that demonstrate quality improvement in both instruction and service.
- 11. Customer satisfaction surveys and organization climate

research have been conducted to determine progress in quality improvement in instruction and services for FVTC's students and internal customers.

12. The college is beginning to integrate quality into every process of the school and has begun teaching quality concepts and problem solving skills to all students in every instructional program.

Six years into the process, it is time to reflect on how well FVTC has done. Staff have learned that the college does, in fact, have customers just like any other business, and their student customers are paying for a service. The college's product is education for employment. FVTC is convinced that it is possible to define competencies in education and require students to have mastery of those skills before graduation. FVTC believes that a school can be managed like a business even though it is a not-for-profit institution. It also maintains that a college can benefit from quality and productivity theory because a school is similar to a business in that both are complex organizations offering services to customers.

Like most organizations in the midst of quality improvement, FVTC can best be described as "moving perpetually toward excellence." The college has made major gains and now is taking a good, hard look at the role of the various personnel groups at FVTC and putting some "teeth" into the changes suggested by staff. The system is one of continuous review of all processes in a quest for constant improvement.

Through it all, one thing is certain; FVTC is infinitely wiser and has learned from its successes and failures. The college is like business and industry in ways that weren't anticipated. FVTC has learned from them that quality happens best not on an institution-wide basis but rather at each work unit level. The college knows, as experts profess, that the greatest impact of all this will occur as frontline departments and work unit staff tackle problems and control the process through continued monitoring of variation. Many of the concepts being hailed as TQM are only parts of it. TQM requires organization-wide application. FVTC believes the impact of all this can be debated, but here are several examples of results that may be attributed to its transformation:

- Increased placement rates—FVTC's placement rate has risen by 5% and, in 1992, was at approximately 92%.
- Fewer dropouts—There are 26% fewer dropouts this year than last year the same time.
- Increased enrollment—FVTC has had steady increases in

enrollment since 1988 with the greatest increases occurring in business and industry contract training.

- Increased employee satisfaction—Institutional research shows that several factors related to employee morale and satisfaction have improved at significant levels.
- Greater accountability—The college is more accountable because of its research design, guarantees, competency-based approaches, and its instructional and service audits.
- Better customer service—FVTC's research supports a general improvement as perceived by everyone defined as its customers.
- Reduced cost—The college's cost containment plan illustrate how costs have been reduced and maintained at levels below other public service averages.

In short, because of the quality process, FVTC is a much better college today than it was in 1985. New strides are being made and the college has gained by recognizing a new importance in the role that people have played in the progress and success of the school. FVTC has a long way to go before it can begin to be satisfied. It needs to continue to change and change drastically if it is to remain dynamic and competitive because schools will continue to be challenged by increased competition and be asked to do more and do it with less. FVTC is convinced that it can meet those challenges as well as new ones through the quality process. The changes being made at FVTC are not minor ones that just tinker at the margins. Total quality is the development of a deliberate, well-coordinated plan to innovate and excel at everything by continually striving for perfection. This requires structural and cultural changes that get at the heart of what is really needed. FVTC is willing to risk failure while establishing new paradigms to gain success. In doing so, the college must turn its back on some of its oldest traditions. These challenging times demand it.

For education, this means reemphasizing the importance of working closely with business and industry to provide skilled workers who can cope with new environments in quality and productivity. Curricula must be completely redesigned so that quality competencies and concepts are taught and used by students in every instructional program. Graduates of all schools must be articulate about the terminology and concepts of quality. They must become competent in using interpersonal skills, problem solving techniques, team-building concepts, statistical process control, planning tools, and conflict resolution skills to enter the private sector world of quality.

Educators must practice those same skills, especially in their teaching techniques, and become role models for students. New team management skills and new ways to operate with selfmanaging teams must be developed. Managers must employ leadership practices that include enablement, empowerment, shared decision making, and improved communications. Ouality must be practiced through doing things right the first time, though the reduction and elimination of defects, and by meeting and exceeding customers' expectations. This dynamic environment and these new changes in curriculum will provide business and industry with graduates who are ready to enter the world of quality and productivity. With these new skills, our graduates will lead the way in making business and industry competitive, progressive, efficient, and accountable. Organizations must be flattened and management and staff positions redesigned to accommodate these changes. That requires providing teamwork and problem solving training that is ongoing and intensive. Colleges must develop and use streamlined information systems that will provide concise data to help in management and shared decision making. This improved information must be usable and accessible to all employees, not just a chosen few. Educators must also look at new ways to compensate and reward staff for the lockedstep salary schedules so predominant in education. It must be recognized that people are inherently competent and with shared power, everyone wins. In providing any service, people make the difference.

Those working in education can prove that they can clean up their act through transformation and reform, which they initiate themselves using prescriptions that have worked in the private sector. This type of reform will make U.S. schools better places to learn, teach, and work. Through it all, it must be realized that change for the future is not criticism of the past.

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