

# **Is TQM a Viable Model for Leadership in University Kinesiology Departments?**

**Brian Sather**

**January 2008. Albuquerque, New Mexico: NAKPEHE Annual  
Conference**

## **Intro**

- **International Organization for Standardization (ISO)  
Definition: "TQM is a management approach for an organization, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organization and to society."**
- **More of a concept (philosophy) rather than a specific model**
- **Other names: continuous quality improvement (CQI), total quality improvement (TQI), or total quality (TQ)**
- **Fad?**

## **Important Concepts**

- **Meet needs of employee: Principle that employees intrinsically want to do their best**
- **Meet needs of customer: Customer orientation**
- **Examine the product: Does it do what it is supposed to.**

**Marchese (1993) outlined six specific concepts for applying a TQM model to higher education:**

1. **Customer Focus: External customers are businesses and donors while internal customers include students and support staff.**
2. **Continuous improvement: Teaching and learning should be continuously improved.**
3. **Management by fact: Everyone should focus on the central mission of the university. Use facts to find out what the problems are and fix them. Academic administration is largely too informal, and loosely coupled, when solving problems.**
4. **Benchmarking: Identify key work processes and then find the school that does the best job at those tasks for**

**a comparison. After finding the “best practice,” study it, adopt it, and try to match it or do better. Many cost-effective academic processes have been developed over the years that have not been adopted by other schools. A major factor holding universities back from benchmarking is a detrimental focus on uniqueness. Universities are too introspective and status driven.**

- 5. People: Humans are the most important asset of the institutions and should be given the tools and power to achieve their best.**
- 6. Organizational structures: The structure should be based on the needs of the customer. Universities tend to be too hierarchical and compartmentalized to accomplish this. Any collaboration between departments in enhancing the student’s education seems to be feeble.**

**Example: Involve students, graduates, and business executives in establishing curricular validity and recommendations. A specific feedback control used was a behaviorally anchored criteria instrument.**

### **Benefits**

- Improvement of morale found.**
- Better management processes established.**
- Accreditation: TQM clearly defines "quality."**

### **Questions**

- Are any of these principles specifically at work in your department? Specific examples?**
- Other models?**

## **ABSTRACT**

Total Quality Management (TQM) was a process used in higher education beginning in the 1980s and greatly expanded in popularity in the 1990s (Marchese, 1993). The model has also been termed continuous quality improvement (CQI), total quality improvement (TQI), or total quality (TQ) but all focus on the concepts of total quality management.

The principles of TQM are applicable to higher education, particularly the principle of customer orientation (Owlia & Aspinwall, 1996). A major advantage of TQM is that it operates on the principle that employees intrinsically want to do their best (Marchese, 1993). This concept directly supports professors' tendency toward intrinsic motivation and autonomy. Another advantage is the adaptability of TQM.

Various concepts have been applied to the application of TQM in postsecondary schools. For example, Brigham (1993) identified three cornerstones: employee involvement, the improvement of processes linked to results, and an enduring focus on the customer. Marchese (1991) characterized the TQM culture as quality-driven, customer-oriented, avid about improvement, and marked by teamwork. Marchese (1993) also outlined six specific concepts for applying a TQM model to higher education that will be discussed.

In this presentation, the concepts and history of TQM in higher education will be discussed. Are TQM principles currently used in kinesiology departments? Is TQM practical in a kinesiology department? What other progressive managerial models are realistic?

**Additional excerpts from p. 25 of Sather, B. A. (2004). Managerial Control of Faculty by Physical Education Department Chairpersons. Unpublished doctoral dissertation, Texas Woman's University, Denton, TX.**

## **Total Quality Management**

An emphasis on quality control in industries has evolved and adapted over time (Garvin, 1999). The concepts of total quality management (TQM) grew from the ideas of Joseph Juran, Armand Feigenbaum, Edwards Deming, Phillip Crosby, and Kaoru Ishikawa among others. The movement became very popular in United States when Ford, Motorola, Xerox, and IBM found success in adopting TQM. One of the recent standards used to assess TQM is the Malcolm Baldrige Award criteria which defines core values used in the assessment of for the National Quality Award (Marchese, 1991). The Baldrige Award organizers have added a category for recognizing TQM in educational institutions (Costin, 1999). Specific criteria for evaluating TQM in education were developed to aid in determining the recipients.

Total quality management (TQM) was a process used in higher education beginning in the 1980s and greatly expanded in popularity in the 1990s (Marchese, 1993). Furthermore, it has dominated discussions in various higher education association meetings since its inception (Marchese, 1991). The principles of TQM are applicable to higher education, particularly the principle of customer orientation (Owlia & Aspinwall, 1996) Participants at an international meeting concluded TQM was just as relevant in educational institutions as any other enterprise (Madsen & Carlsson, 1995).

A high level of TQM use by administrative, support, and academic departments (38%-50%) was found in 1995 and 1998 (Vazzana et al., 1997, 2000). In 1995, 72 percent and in 1998, 78 percent of institutions studied involved employers, students and business leaders in developing curriculum. Forty percent used training techniques in TQM. However, only a small number of institutions, 17% in 1995 and 15% in 1998, were employing a complete TQM model.

Schools that adopted TQM included research universities such as Oregon State, Wisconsin, Penn, Harvard, Carnegie Mellon, Maryland, Wyoming, Clemson, and Miami (Marchese, 1991). Edwin Coate, the president who first brought TQM to Oregon State, outlined his plan in the book *Strategies for Quality Improvement* (Coate, 1999). Oregon State abandoned TQM following the departure of Coate (Aly & Akpovi, 2001). Also, many community colleges have successfully undertaken total quality initiatives but liberal arts colleges have been noticeably underrepresented in the adoption of TQM. In the California University System, over half of 22 universities used TQM. Of these, only 6% were implementing TQM in their departments while 76% were implementing the concept in administrative services. (Aly & Akpovi). Some call the process continuous quality improvement (CQI), total quality improvement (TQI), or total quality (TQ) but all focus on the concepts of total quality management. TQM is practiced in the United States far more than in Europe (Madsen & Carlsson, 1995).

Vazzana, et al. (2000) identified three uses of TQM in higher education:

**TQM in the curriculum:** Most commonly taught in engineering and business schools.

**TQM in nonacademic functions:** Administrative and support departments use the process for maintenance, contractors, etc.

**TQM in academic administration:** Process is used in academic administration and tends to focus on discrete projects.

**TQM in the core curriculum:** Some classrooms have been organized to follow the principles of TQM in the student's learning. This approach is also used to integrate learning across the curriculum.

Although TQM can be applied to any of these areas, the focus of this research is related to TQM for administrators managing faculty. Various concepts have been applied to the application of TQM in postsecondary schools. For example, Brigham (1993) identified three cornerstones: employee involvement, the improvement of processes linked to results, and an enduring focus on the customer. Marchese (1991) characterized the culture as quality-driven, customer-oriented, avid about improvement, and marked by teamwork.

Marchese (1993) outlined six specific concepts for applying a TQM model to higher education:

**Customer Focus:** External customers are businesses and donors while internal customers include students and support staff. One must exercise good judgment when deciding what customer demands will be met. Managers and professors must clearly identify their customers and systematically listen to them. Judge quality by measuring the degree to which customer needs are met because needs are knowable and trackable. (Note: University professors most often ranked students as the number one customer followed by employers, society/government, faculty members, and families [Owlia & Aspinwall, 1996]. Despite arguments that universities' customers are something other than the students [Bailey & Bennett, 1996], other research supports the view that students are the primary customers [Madsen & Carlsson, 1995; Wallace, 1999].)

**Continuous improvement:** Teaching and learning should be continuously improved. Avoid personal excuses like "that takes more time," and strive for the professional need for improvement. Despite good intentions, many professors fail to follow through on improving student learning.

**Management by fact:** Everyone should focus on the central mission of the university. Use facts to find out what the problems are and fix them. Academic administration is largely too informal, and loosely coupled, when solving problems.

**Benchmarking:** Identify key work processes and then find the school that does the best job at

those tasks for a comparison. After finding the “best practice,” study it, adopt it, and try to match it or do better. Many cost-effective academic processes have been developed over the years that have not been adopted by other schools. A major factor holding universities back from benchmarking is a detrimental focus on uniqueness. Universities are too introspective and status driven.

**People:** Humans are the most important asset of the institutions and should be given the tools and power to achieve their best.

In TQM, 85 percent of the problems that arise in the course of work are attributable to the organization's systems, just 15 percent to the shortcomings of individual employees. The manager's job, then, is to improve constantly the work systems of the organization, to drive out blaming and fear, to remove obstacles in the system that prevent persons or teams from doing their best work. (Marchese, 1993, ¶ 22)

**Organizational structures:** The structure should be based on the needs of the customer. Universities tend to be too hierarchical and compartmentalized to accomplish this. Any collaboration between departments in enhancing the student’s education seems to be feeble.

How can these principles be applied? In one example, Vazzana and Winter (1997) described their implementation of the TQM concept of continuous process improvement (CPI) at Central Missouri State University. In applying the above concepts, the department relied heavily on the mission statement to arrive at outcomes for graduates. In support of the “customer-driven” concept, they involved students, graduates, and business executives in establishing curricular validity and recommendations. A specific feedback control used was a behaviorally anchored criteria to assess teaching and learning to help determine areas needing improvement. Furthermore, students (the customers) were asked how the learning process should be enhanced.

A major advantage of TQM is that it operates on the principle that employees intrinsically want to do their best (Marchese, 1993). This concept directly supports professional employees’ intrinsic motivation. Another advantage is the adaptability of TQM. Marchese (1992a) concludes that no two applications of TQM are alike, despite the widespread use in many different industries. Since each campus works with its own culture and set of problems, the adaptability of TQM fits perfectly in higher education.

Over time, TQM has proven to yield some success. Connecticut Colleges increased faculty grades handed in on time from 30 to 98 percent (Marchese, 1991). Fox Valley Technical College (WI) experienced numerous benefits including increased morale, making it a benchmark for other schools adopting total quality. Aly and Akpovi (2001) reported that over half of the California University System schools using TQM have reported improvements in their managing process. Twenty-four percent indicate TQM improved morale and created a greater team atmosphere. However, from the academic perspective only 12 percent reported quality improvements. They conclude little effort had been made to improve customer service in the classroom. The main challenge is the resistance to change from faculty members, administrators, and staff. Other challenges included a lack of resources and lack of leadership.

TQM can be an advantageous approach for administrators faced with accreditation issues. When faced with increasing demands of accreditation, “quality” is a vague term that is difficult for administrators to quantify. “TQM, on the other hand, is very clear about the quality it wants, has explicit ways of getting at performance improvement, and right now enjoys wide corporate and governmental support” (Marchese, 1992b, p. 4).

One potential problem with TQM in higher education is the limited use of the feedback control tools. Vazzana, et al. (2000) indicated only 23 percent of schools studied used scientific tools such as statistical analysis to measure the effectiveness of the process. They were surprised by the irony that university teachers rely so much on scientific analysis in their teaching, yet failed to rely on the scientific analysis tools to evaluate their effectiveness.

Before higher education authorities adopt TQM, it is important to note that TQM has suffered many failures in industry. Although many companies stay loyal to TQM, many other companies have abandoned the concept due to early inflated expectations (Mathews & Katel, 1992). TQM has gone through a significant change when applied to different industries and will diverge even farther when applied to education. Higher education must be wary because of evidence that the service industries have been less successful than manufacturing when implementing TQM (Brigham, 1993).

Harari (1997) concluded from the research that about one-fifth of TQM projects in the United States and Europe failed to achieve significant improvements. He then went on to suggest 10 reasons TQM yields such poor results. Among these are TQM’s overemphasis on internal processes rather than external results, an overemphasis on minimum standards, and a tendency to drain innovation from the organizational culture. On the other hand, Becker (1993) refutes Harari’s claims in his article titled “TQM does work: Ten Reasons why misguided attempts fail.” Beck accuses Harari of assuming his 10 reasons are consistent with TQM, and since they led to failure, he errantly assumed that TQM is a failure.

Koch and Fisher (1998) also provided evidence showing TQMs disappointing results in higher education and argue against its implementation. Despite the popularity of TQM in the California School System, 41 percent of the schools (Aly & Akpovi, 2001) studied had dropped some aspect of the TQM program due primarily to unsatisfactory results or changes in leadership. Oregon State University, one of the original school to implement TQM, stopped the effort immediately after the president left. With this in mind, it is important to learn from the failures in other situations and exercise caution regarding the use of TQM. Most of the gains have been related to the administrative aspects of universities not the academic. Marchese (1996) explains the reason for this as follows: “CQI’s emphasis on customer focus, data, teamwork, and systems thinking runs counter to the internally focused, opinionated, problem-chasing world of campus life. Crucially, most of American higher education doesn’t yet believe it has a quality or a productivity problem . . .” (¶ 6). Jauch and Orwig (1997) concluded that TQM should not be involved in the academic processes of higher education.

Another major disadvantage is the potential high cost. More specifically, the process provides

little protection against economic slumps (Mathews & Katel, 1992). TQM is not a way to cut costs and save money; rather, it is aimed at improving quality and putting the customer first (Marchese, 1991). Patience and an atmosphere of employee support for administration are important for making TQM work. These detrimental factors are not promising with higher education's current financial challenges. However, when faced with slow initial financial results, the Japanese patiently continued with TQM until it eventually yielded financial success in the industrial sector. Patience may be the factor that solves the financial concern of initiating TQM but few programs in higher education have withstood the test of time to produce results that can serve as an example for other institutions to follow.

A further concern of TQM is the likelihood it is just another fad like Management by Objective (MBO) and Zero-Based Budgeting (Marchese, 1991). Typically fads arrive at higher education 5 years after their initial trial in business. Adopting TQM may be a financial gamble if the concept soon disappears. However, some management fads stick, like marketing and strategic planning. The research indicates that TQM continues to maintain stability as a management process in universities over the past 20 years.