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ABSTRACT

This policy brief examines the fundamental principles that undergird the current Total Quality Management (TQM) movement, describes application examples and discusses application problems particular to higher education. An opening section reviews the basic premises of TQM and differentiates between two perspectives on the approach: the first see TQM as a management system with customer satisfaction as the crucial element, and the second sees TQM as a philosophy fostering change in the culture of the organization. Samples of institutions from universities to community colleges are described in order to demonstrate the various ways the TQM approach can be applied in higher education settings. These applications are grouped as follows: unit-wide initiatives; institution-wide two-year college initiatives; institution-wide four-year college initiatives; and state-wide initiatives. The paper examines challenges to TQM implementation in higher education in the areas of customer image, faculty identity, reward systems, and tenure systems. A look at common implementation mistakes covers lack of leadership and commitment at the top, insufficient base of support, failure to recognize costs, failure to recognize the complexity and difficulty of solving some problems, and confining efforts to administration and support functions. It is concluded that acceptance of TQM at the faculty/teaching level is far off. (JB)



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While skeptics rail that total quality management is just the "latest jargon" for collaboration and shared governance, the quality movement nevertheless appears to be making inroads into the hallowed halls of higher education. Spurred on by tightening fiscal resources, rising operating costs and demands for accountability by an increasingly diverse public, colleges and universities across the country eye total quality management as a possible remedy for their ills.

This policy brief examines the fundamental principles that undergird the current quality movement, describes several different quality efforts and discusses some of the challeng-

es, which confound the application of total quality management concepts in higher education.

The Basic Premises of Total Quality Management

Whether colleges and universities term their efforts TQM, quality improvement, strategic quality management or continuous quality improvement, or base their approaches on the writings of Deming, Juran, Crosby, Cornesky or Seymour, all espouse certain common principles.

TQM grounds itself in the pursuit of quality through a process of continuous improvement. Incremental change results from decisions, which are grounded in fact, and reflects a longitudinal attempt at problem anticipation and prevention. An institution, under TQM, seeks to empower its employees across functions to confront organizational issues and rewards its employees accordingly. All the while, it maintains a focus that identifies both internal and external customers.

Although the various TQM approaches build on similar key concepts, each can be viewed from two distinctly different perspectives. The first sees TQM as a management system. Customer satisfaction becomes a crucial element of



an overriding "let's be more businesslike" theme. The time, energy and money spent lead to well-trained, cross-functional teams schooled in the effective use of analytical tools such as flow, Pareto and fish bone charts, affinity diagrams, scatter plots and histograms. These teams monitor and control college and university processes in an effort to improve quality.

The second embraces TOM as a philosophy. Here again, formal training and a common rhetoric prevail, but the primary goal--continuous (or incremental) improvement--pushes TQM to the heart of the organization--its culture. Ultimately, TQM fosters change in the organization's core values and the integration of TOM principles into its everyday way of doing business. It propagates a "quality service for all" attitude, which values coworkers, students, supervisors, employees and the community external to the college.

Potentially Successful Initiatives

While the ranks of TQM institutions include the likes of Oregon State, Wisconsin, Minnesota, Washington, Penn, Colorado State, Harvard, Carnegie Mellon, Lehigh, Arizona State, Iowa, Kansas, Michigan and Miami, this list is not exhaustive. Several community

colleges and technical institutes embraced the quality movement earlier than most fouryear universities. Adoption of TOM can take several forms. Each not only differs in breadth but also in the degree of overall institutional commitment. None has been in place long enough to determine whether documented improvements will become lasting models of quality or reflect only momentary glimpses of a fleeting vision. Not all colleges and universities are discussed here; however the examples chosen do offer a sampling of the various approaches currently being employed.

Unit-wide Initiatives

In these cases, total quality management implementation is confined to special projects typically in service and support areas where success is likely and the results fairly visible. For instance, Pennsylvania State University reduced trash removal costs and streamlined research cost recovery procedures; the University of Kansas reduced the time spent to generate a student work-study check from sixteen days to three. The Universities of Miami and Chicago have integrated TQM into their MBA curricula and into some classroom and support service functions. Student (customer) satisfaction has improved, but it may be too soon to tell whether tasting quality improvement will result.

Institution-wide, Two-year College Initiatives

Delaware County Community College (Pa). In 1985, DCCC decided that instead of solving its problems by spending more money, it wanted to improve institutional quality by conserving resources, by improving effectiveness, by surviving increased competition via the establishment a market niche based on quality and by increasing participation in decision making. DCCC joined the quality movement. To begin with, it educated its executive team, Institutional Research personnel and an implementation team in the principles of TQM. The DCCC threepronged plan then targeted the period, 1986-1991, for its first stage. During this phase, the college implemented TOM in areas such as telephone service, academic computing, parking, student employment and facilities usage. During the second stage, 1987-1991, the college developed a TQM curriculum through which it could provide contracted training for businesses and also offer a certificate program. The certificate program--TOM Technology--is in place and DCCC supports several local industries, state agencies and federal offices through contracted service. Stage three, 1989-1996, involves implementing TQM throughout the teaching and learning process. Faculty involvement is voluntary; some experimentation is taking



place; but progress is expected to be slow. Benefits to date include better problem and objective definition, improved documentation and standardization of college operating procedures, increased staff development, more teamwork and more careful planning at the administrative level.

Fox Valley Technical College (Wi). Fox Valley's initial exposure to TQM parallels that experienced by Delaware County. FVTC started offering quality courses in 1985 at the request of local businesses. It then began instituting TOM practices through a quality improvement council and special problem solving teams. Most recently, FVTC cut \$1.2 million (slightly over 3 percent) from its \$38 million operational budget. By prioritizing programs and facilities, equipment and staff needs, TQM teams developed an operational plan that reduced the budget without personnel or program cuts. Presently, Fox Valley's Quality Institute works with other colleges that are interested in incorporating TQM into their operations.

Institution-wide, Four-year College and University Initiatives

Oregon State University.

Probably the most widely publicized institutional attempts at TQM come from OSU. In 1989, with full presidential support, OSU brought in speakers and consultants (including W. Edwards Deming)

and staged retreats designed to educate colleagues and to build support. In 1990, OSU took TQM institution-wide in its primary support functions (i.e., physical plant) to address specifically targeted priorities such as shortening the completion time for remodeling jobs and reducing paperwork errors. At the same time OSU developed a system for identifying and prioritizing customer needs. OSU uses breakthrough planning to examine what it terms "critical processes." Oregon State also makes an effort to recognize both outstanding individual and team efforts through its reward system. Cross-functional pilot projects are being developed with the intention of converting selected university committees to TQM. Some faculty members have begun experimenting with TQM in their classrooms, but to date most academians remain suspicious. In its first successes, OSU reduced remodeling job time by 23 percent and department journal voucher errors by 94 percent. Currently, OSU hopes to successfully address the effects of massive state budgetary cuts by using TQM. Only time will tell whether it can be successful in this most recent endeav-OT.

State-wide Initiatives

North Dakota State University System. In 1989, the State Board of Higher Education formalized its commitment to TQM when it endorsed the North Dakota State University System "Partners for Progress Plan for 1990-1997." This first-of-its-kind plan sets 1997 TQM goals that the Board hopes will create community, ensure quality and reduce costs. The plan advocates continual quality improvement in areas related to faculty, graduates, research and public service.

Minnesota State University
System. One year later, the
Minnesota system adopted a
TQM derived "Q-7" program.
Based on the state's Strive Toward Excellence in Performance (STEP) governmental
program, Minnesota's move
toward TQM signals its attempt
to deal with financial constraints that plague the state
government and the university
system alike.

Challenges to Total Quality Management Implementation

Customer Image

Multiple constituencies intertwined in complex relationships force educators to grapple with the identification of just who their customers might be.

Connotatively, the term, customer, conjures up visions of educational institutions as money grubbing entities where price reigns supreme. To faculty, calling students, their families and alumni customers seems crass. Academians balk at using the term, customer, to describe students because they



3

believe that it signals their acceptance of the assumption that the customer is always right. Defining quality under such circumstances becomes a dubious task mired in the rhetoric of customer satisfaction-a satisfaction of personal wants and self-centered desires for instant gratification.

The observation that students rarely know what they need. but rather enter an educational setting to discover just what those needs might be, bears much merit. TQM, however, does not necessarily suggest that students should hold sole proprietorship over content determination but only that they be involved as active and creative participants in the education process and its overriding purpose--the pursuit and discovery of knowledge. Quality education then results from a multi-faceted effort on the part of all constituencies-students. their families, alumni, the commuraty and faculty.

Faculty Identity

A more subtle challenge centers on faculty identity based on discipline rather than institutional affiliation. Individual and discipline foci seem to be at odds with the cross-functional learn approach to enriching an organization, which quality movements embrace. Developing an institutional culture that incorporates the pursuit of disciplinary excellence is a time-

consuming endeavor that could tax but not necessarily thwart college and university governance systems.

Reward System

The reward system in colleges and universities may also be inconsistent with continuous improvement toward quality objectives. This may be especially true at research universities where most incentives reinforce time spent by faculty on research projects at the expense of teaching. However, increasingly, colleges and universities proclaim the need to improve undergraduate education, which hinges on the quality of classroom teaching. If colleges and universities claim that they need to improve the quality of undergraduate education, then colleges and universities must recognize improvements in the quality of teaching and reward them accordingly.

Tenure System

Finally, the traditional tenure system, and the unparalleled sense of security that it imparts, often discourages change by promoting the status quo. In fact, tenure systems often impede the recognition of telltale signs that herald a need for change. Looked at from a quality movement perspective, however, tenure could foster innovation and creativity by freeing faculty to take risks.

Common Mistakes in Implementation

Some colleges and universities, many times pressured by external constituencies, rush to climb aboard the total quality bandwagon only to find disappointment and, in the end, either minimal institutional commitment to or total rejection of the concept. Five common threads run throughout most of these mishaps.

A Lack of Strong Leadership and Commitment at The Top

If top administrators remain unconvinced and uncommitted, the institution lacks the visionary leadership that facilitates, mentors and models the essence of organizational and cultural change which any movement toward continuous quality improvement demands. Strongly committed leadership can lead an institution into a culture that not only espouses educational quality but continuously works to provide it.

An Insufficient Base of Support

Institutional change based on cultural revitalization and reconfiguration takes time and energy. If all inspirational efforts reside with very few proponents, necessary cultural and behavioral changes may never manifest themselves. Sconer or later, no matter how worthy the cause, a lone champion



wears down, burns out or simply moves to a more supportive environment.

A Failure to Recognize The Costs

Financially, the immediate costs of training, educating and reeducating administrators. staff and faculty could be substantial. Even if monetary expenditures are taken into account, the greater cost--time expended--often goes unacknowledged. Without a conscious effort to recognize this need and to provide sufficient release time for those involved, total quality efforts eventually take peripheral positions of importance or die away completely.

Too Complex Projects, Too Little Time, Too Few People

Institutions sometimes see a problem but fail to detect the underlying manalicity of contributing events and processes. Immediacy drives the resolution process and leaves issues only partially articulated. Failure to dissect, diagnose and divide the problem in order to conquer it relegates colleges to bandaid treatments, which may temporarily relieve the symptoms but fail to cure the problem. These colleges and universities look for quick fixes to incredibly complicated situations that took years to develop. Unrealistic deadlines coupled with cursory delegation of manpower to the project suggest a failure on the part of the college to establish the problem's resolution as a top priority and a misunderstanding of what TQM is all about. Small, well-defined, visible projects lead more times than not to successful outcomes. A history of small successes lends credibility to the college's overall approach to quality improvement.

Confining Efforts to Administrative and Support Functions

If the essence of education is teaching and learning, concentrating improvement efforts on a college's administrative and support functions will only superficially affect what happens in the classroom. Unless faculty recognize a need for systematically improving the educational environment to meet the needs of a continually changing and evolving student body, what goes on in the classroom will not change. This is not to say that all classrooms and all faculty need to change. Confining total quality efforts to administrative and support functions does, however, send a message to the public, which ultimately pays for higher education, that what goes on in the classroom is so sacrosanct that it remains untouchable. In times of financial constraints and public demands for accountability (and quality) is this the message that colleges and universities want to send?

Conclusion

Adopting TQM as a management system tends to channel implementation efforts into college and university administrative and support areas such as the physical plant, budgeting, admissions, registration, parking, purchasing, health and food services and the library and away from the classroom. While exposure to TQM in the university (college) setting appears to be growing, to date, most colleges and universities seem to view TQM from this management perspective. Some faculty will (and do) experiment with TQM, but most will not. Is total quality management just the latest management fad, or will TOM, the organizational philosophy, become a lasting legacy? Current experience suggests that the acceptance of TQM as a viable, philosophical approach to improving the most crucial element of the learning environment-the classroom--remains a very long way off.



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