

THE STATE OF QUALITY IN HIGHER EDUCATION

By Dr. John Robert Dew

The level of knowledge and application of quality management methods has gradually increased in American higher education over the past decade. While the number of higher education institutions with formal improvement initiatives remains small, progress is definitely occurring at community colleges, private colleges, regional universities, and national research universities. Any attempt to summarize this progress is bound to omit some campus that has an outstanding program, but an attempt at a summary, regardless of its shortcomings, will be of interest to members of the community of quality professionals.

Community Colleges

Approaches for using quality management principles among community colleges began in the late 1980s and early 1990s.

Western Wisconsin Technical College started exploring the work of Dr. W. Edwards Deming in 1988. With the selection of Dr. Lee Rasch as President in 1989, WWTC launched a campus continuous improvement initiative, provided training for faculty and staff, and organizing improvement teams. WWTC has pioneered many innovative approaches to continuous improvement, and used the Wisconsin Forward Award application in 1999 to conduct a campus-wide self-assessment. WWTC's early work in continuous improvement positioned them to quickly adopt the North Central Association's Alternate Quality Improvement Process in 2001.

Fox Valley Technical College, in Appleton, Wisconsin, was another early leader in quality, using continuous improvement tools for planning new academic programs. FVTC created over 50 improvement teams by 1992.

The Eastern Iowa Community College District, comprising three campuses, launched a continuous improvement initiative in 1992 and 1993, and worked with other colleges to establish the Continuous Quality Improvement Network (CQIN), which has developed quality-based self-assessment tools tailored for the community college and small campus.

Many other community colleges came on board with improvement initiatives in the late 1990s. Community colleges often provide quality workshops for their local communities, and are frequent partners with local sections of the American Society for Quality (ASQ) for quality related training, so there are many opportunities for community college leaders to learn about continuous improvement principles and methods. Community colleges are often involved in helping regional organizations prepare and compete for state level continuous improvement awards, so it is logical for them to become engaged with quality improvement. Lakeshore Technical College, for example, applied for the Wisconsin Forward Award in 2000, and has developed a quality based strategic planning model.

Private Colleges

Continuous improvement among private colleges and universities may have started in 1989 when Bill Trout, President of Belmont University, in Nashville, Tennessee, attended a seminar with Dr. Deming. In 1990, Dr. Trout had most of Belmont's Deans attend a Deming seminar and established a Center for Quality at Belmont. Belmont won the prestigious Tennessee Quality Award in 1993 and played an important role in the development of a version of the Malcolm Baldrige National Quality Award for Education, and in developing the quality-based revisions to the Southern Association of Colleges and Schools' (SACS) re-accreditation process.

Concurrently, Samford University, in Birmingham, Alabama, began its "Student First Quality Quest" under the leadership of Dr. Thomas Corts. Samford obtained a FIPSE grant in 1990 to help launch its continuous initiative which applied continuous improvement methods to academic programs and administrative activities. Dr. John Harris and Dr. Mark Baggett collaborated with the faculty at Samford, Belmont, and The University of Alabama to produce the first broad account of a quality improvement methodology for a campus, Quality Quest in the Academic Process, published in 1992.

Samford and Belmont were instrumental in sharing their quality model with other institutions throughout the 1990s. Dr. Corts subsequently led the effort to integrate continuous improvement concepts into the SACS re-accreditation model.

Villanova University established its continuous improvement initiative in 1993 with a quality steering committee. They began conducting orientation and training sessions during the summer of '93, and soon had a vibrant program working on dozens of initiatives. Those dozens have grown into hundreds over the past nine years.

The University of Miami (Florida) likewise initiated a continuous improvement initiative in the early 1990s. The Miami initiative was focused on projects and processes in the Financial Affairs area, where the university has developed one of the best sets of performance measures for a university's financial and support processes in the country.

Public Universities

The continuous improvement initiative in the large public universities likewise emerged in the late 1980s. Pennsylvania State University was faced with the prospect of losing \$40 million in state appropriations and began investigating ways to improve performance. While studying Deming's ideas, Penn State settled on Dr. Joseph Juran's approach for organizing a quality initiative and used the Juran On Quality video series to initiate quality training on their campus. Penn State's continuous improvement initiative continued to grow into hundreds of successful improvement projects, leading them to pilot the concept of a campus continuous improvement forum to showcase their successes.

The University of Wisconsin – Madison launched a continuous improvement initiative at almost the same time, when Dr. Donna Shalala decided to start an organized effort to eliminate long lines for students and to improve administrative processes. The next Chancellor, Dr. David Ward, saw the importance of integrating continuous

improvement with strategic planning and the benefits of applying continuous improvement concepts to academic programs. UW-Madison was also able to make effective use of local resources to grow their quality initiative, since the Madison area hosted the Hunter Conference, one of the country's top annual gathering of quality professionals. Like Penn State, UW-Madison's continuous improvement initiative has resulted in hundreds of improvements in academic and administrative processes and the close integration of quality management and strategic planning.

Oregon State University began looking at the work of Deming and Juran in 1990 and invited Deming to their campus to speak. OSU established ten initial teams and conducted many successful improvement projects. Under the leadership of Edwin Coate, Vice-President for Finance and Administration, OSU created a continuous improvement model that identified critical processes and an analysis of quality issues in higher education that were ten years ahead of most other campuses.

OSU identified 20 campuses that were piloting continuous improvement initiatives in 1991. Through a telephone survey, OSU found that 70% of these schools had continuous improvement teams in administrative areas, and 45% had them in academic areas. Unfortunately, OSU's leadership lacked what Deming called "constancy of purpose." With changes in leadership, the continuous improvement initiative at OSU faded into history.

Purdue University launched its continuous improvement initiative in 1992 with over 100 administrators attending quality improvement training at Motorola. Purdue has maintained a continuous improvement focus for a decade, renewing its initiative in the late '90s as the Excellence 21 program.

Many other major public universities, such as the University of California – Berkeley, Binghamton University, The University of Alabama, and Michigan State University began continuous improvement initiatives in the mid 1990s, learning from the successful programs at UW-Madison, Penn State, Villanova, Belmont, Samford, and Rutgers.

Regional Public Universities

Several public regional universities rose to national prominence for their leadership in applying quality concepts in higher education throughout the 1990s. Because of their size and mission, regional universities, like private institutions, are often better positioned than large research universities to embrace the broad concept of a quality management system, as described in the Baldrige Award, or in state-level quality programs that are based on the Baldrige criteria.

No campus in the country has gone further than the University of Wisconsin-Stout, the first university to win the Baldrige Award. Under the leadership of Dr. Charles Sorensen, UW-Stout has developed a comprehensive management system for its entire campus that fully embraces the continuous improvement concepts. While many campuses have been successful with process improvements, integrating quality and strategic planning, or the use of performance measures, or the use of continuous improvement methods to improve core academic processes, UW-Stout is the first to combine all of these in a sustained, systematic approach.

Other regional universities, such as Northwestern Missouri and the University of Missouri at Rolla have been successful with using state level quality award programs to structure their continuous improvement activities. It is likely that regional universities will be among the next to win a Baldrige Award, if they can survive the current budget crises that is afflicting most state systems.

University Systems

In the mid 1990s, the California State University System launched a major effort to bring continuous improvement methods simultaneously to multiple campuses across a major university system. Under the leadership of the Chancellor, Dr. Charles Reed, the CSU System established a Quality Improvement Planning Committee with representatives from campuses all across the state. CSU has introduced continuous improvement methods on over a dozen campuses. Moreover, the CSU System has developed surveys, performance measures, and balanced score cards for administrative processes that facilitates comparison of performance between campuses, and the sharing of best practices.

CSU initiated an Annual Quality Improvement Program in 1999 that is held in different cities around the state each year. As in the continuous improvement forums initiated at Penn State, teams from campuses from across California share success stories and performance data.

Quality Centers, Faculty, and Campus Quality

Several universities have well recognized Quality Centers that foster quality related research and provide consulting and public workshops on continuous improvement to corporations, government agencies, and health care providers. Most universities also have faculty who teach quality principles in their academic programs.

Many of these Quality Centers have not played a significant role, so far, in establishing a quality focus on their respective campuses. One notable exception is the Office of Quality and Communication Improvement at Rutgers University, under the leadership of Dr. Brent Ruben. Ruben has combined research and consulting on quality in the private sector with the internal continuous initiative at Rutgers. Dr. Ruben's involvement with the National Association of College and University Business Officers (NACUBO) led to the creation of the National Consortium for Continuous Improvement in Higher Education (NCCI). NCCI now has over 50 research universities, regional universities, and private universities and colleges as member institutions, and conducts an annual conference on continuous improvement in higher education that is centered around quality management concepts.

It is a curious fact that many faculty members in the management and engineering disciplines at institutions across the country have not engaged their administrations in applying the quality principles to their organizations. Numerous institutions have tremendous untapped faculty expertise that can help them make significant improvements in both academic programs and administrative support areas.

A noteworthy exception to this is Dr. Howard Gitlow, at The University of Miami, in Florida. Dr. Gitlow was one of Dr. Deming's graduate students, and has worked with the

university's administration for a decade in developing performance measures for administrative processes.

The newest Quality Center at a major university is the Juran Center for Leadership in the Carlson School of Management at the University of Minnesota. Dr. Juran earned his B.S. in Engineering from the University of Minnesota in 1924 and has given his alma mater his collection of case studies and writings on quality improvement that spans over seventy years. The Juran Center for Leadership sponsored a Quality Summit in 2002 with corporate quality leaders, researchers, and quality directors from several universities to evaluate the current state of the quality movement and to define research needs for supporting continued expansion of the use of quality methods.

Corporate Encouragement and Support

Many corporations have encouraged higher education to embrace continuous improvement principles because of the positive impact that continuous improvement methods have had in their own performance. Companies would like to see K-12 and higher education improve, and know that the quality methods actually work in helping to improve planning, work processes, stakeholder buy-in, employee involvement, and measurement and control of an organization.

Several companies banded together in 1988 to form the TQM Forum, designed to encourage universities to integrate the quality concepts into the undergraduate curriculum. In 1991, IBM launched its TQM Competition, providing 8 awards of either \$1 million cash or \$3 million in IBM equipment to campuses interested in quality. 204 universities applied and 9 were selected. Two of these nine were UW- Madison and Penn State, that have sustained their commitment to quality for over a decade.

The TQM University Challenge, funded by IBM, Milliken, Motorola, Proctor and Gamble, and Xerox, provided major grants for universities that would pilot campus Total Quality Management initiatives and integrate quality into the curriculum. 27 research universities submitted proposals and eight universities were selected.

Corporations have continued to support community colleges, private colleges, regional and national public universities when campuses ask for their help. Baldrige Award winning companies, such as Milliken, Motorola, Boeing, Federal Express, and Ritz-Carlton, along with other leading corporations, have continued to provide advice and assistance to schools engaged in the quality journey.

However, in general, few companies have engaged their community colleges and universities as part of their supply chain in terms of providing new employees and on-going professional development, and few are holding higher educators accountable for improving the outcomes of their processes. As long as companies remain quiet on this issue, and continue to contribute to building campaigns, endowments, and sky boxes, most Chancellors and Presidents will remain aloof from the issue of quality management at their institution.

Accrediting Organizations

Regional organizations that accredit community colleges, private colleges, and universities are playing an increasingly important role in the quality movement in higher education. There is a growing emphasis on adding value to the traditional quality assurance function of re-accreditation by adding a quality improvement component, or, in some cases, even entirely replacing quality assurance with quality improvement. The fact is, few schools that undergo the rigors of a quality assurance oriented self-study and assessment are in any risk of not being re-accredited, and most are not motivated by this process to make improvements. The Higher Learning Commission of the North Central Association has launched the Academic Quality Improvement Process (AQIP) under the leadership of Stephen Spangehl. AQIP offers institutions an alternate path based on quality improvement, integrating self-assessment, strategic planning, and quality tools and methods for re-accreditation.

The Southern Association of Colleges and Schools has revised their re-affirmation process for higher education to include the expectation that schools will develop systematic approaches to quality improvement. Six institutions participated in SACS' pilot program for embedding quality improvement initiatives in the re-accreditation process in 2002.

The Tip of the Iceberg

All of the progress that is being made in embracing the quality movement is just the tip of the higher education iceberg. The primary information source in higher ed, *The Chronicle of Higher Education*, refused to even cover the story about the University of Wisconsin – Stout winning the Baldrige Award. Few institutions really collect and study comparative outcome data and few have a coherent concept of their management system. The emphasis in most institutions is to collect data that must be reported to state agencies that often seem to do little with the data that is collected.

As the quality movement gains ground in academia, some faculty are expressing concern regarding what they view as a corporate model of management being imposed on the academy. It is important for higher education institutions that are embarking on a quality journey to emphasize the many aspects of the quality discipline that are rooted in academic research and taught primarily by university faculty.

Relatively few institutions survey their stakeholders in any systematic manner. Most parents with students in college have not been surveyed to determine their satisfaction about the educational services they are supporting, and most companies that hire graduates hear little from institutions in terms of acquiring feedback to improve the preparation of graduates. There are, of course, notable exceptions to these generalizations. Readers might want to visit the web sites of several institutions with strong quality initiatives to appreciate the progress that is being made on some campuses.