

QUALITY MANAGEMENT IN INSTITUTES OF HIGHER EDUCATION: THE BALDRIGE MODEL

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Abstract

Global competition and the changing economic environment, have created a necessity to develop strategies for the development of Higher Education (HE). The success of higher education institutions (HEIs) depends on how the educational leaders work to implement these strategies. However, quality measures play a vital role in the education provided by the higher education institutes (HEIs). Therefore it becomes important to assure quality with sustainable improvement in HE.

Discussions on some special problems arising in this context have been widely published and proposals for the solution have been worked out by the application of quality management systems based on EN/ISO 9000 standards series for educational establishments and educational processes. The EFQM model, geared towards education, has also gained much recognition.

The American Malcolm Baldrige model, based on the National Baldrige Award for Quality and Excellence, will be presented as an alternative quality management model, with special emphasis on education and specific measures of quality in higher education.

Key words: *quality management, challenges of higher education institutes, baldrige national quality award*

1. BACKGROUND

The purpose of this article is to establish, through a review of the literature, the major challenges facing HEI's (Higher Education Institutes). This review determined which challenges were most prominent, enduring, and which may respond to management approaches. One such management approach is the Malcolm Baldrige National Quality Award (MBNQA) process. This process has been used successfully by many different types of organizations. This review examines its history, and applicability to higher education.

2. HIGHER EDUCATION CHALLENGES

This article establishes that the most pressing challenges facing public HEIs now and in the near future are cost, accountability, and access. These challenges are also interrelated. For example, efforts to improve retention and graduation rates (accountability) could lead an institution to recruit more affluent students, which might limit access to other underserved groups (Martin, 2005). These educational challenges also have far reaching social implications. It is not an exaggeration to state that the success of higher education is necessary for the maintenance and expansion of our standard of living.

2.1 Costs

Funding is probably the most pressing challenge for public HEIs (Selingo, 2005). Government support, fundraising, and tuition are the primary sources of funding for most public HEIs (White, 2005). Most direct government funding comes from local or national sources. Support from governments has been declining relative to need for more than 20 years, and this trend is not likely to reverse (Canesale, 2000). . Fundraising is suffering as well. Just as fundraising is receiving more attention in public HEIs (Selingo, 2005), many foundations have reduced giving to higher education (White, 2005). Reduction in both government funding and fundraising have caused public HEIs to

increase efficiency efforts significantly (Levine, 2005). HEIs have little control over the funding they receive from the government or their donors. HEIs have more direct control over what they charge for tuition and fees and how much they spend on expenses to deliver their service; in other words, the value they deliver for the dollars they spend. Academia generally has responded to increasing costs by simply passing them along to the customer; financial pressures from rising costs and cuts in funding have resulted in large tuition increases (Rosenstone, 2004). The National Report Card on Higher Education reports that the increase in higher education costs have outpaced other major sectors of the economy since 1982 (Finney et al., 2008). Tuition increases have created issues of equity and access to public institutions of higher education (Levine, 2005).

2.2 Accountability

The challenge of quality is often couched in terms of accountability and begins with perceptions regarding public institutions of higher education. In this area, some of the news is relatively good. Public opinion generally reflects a high degree of trust in public HEIs (Selingo, 2004; Wadsworth, 2005). Measures of satisfaction with public HEIs are relatively high. But satisfaction with access and cost are becoming more important, satisfaction with these issues is declining (Wadsworth, 2005). While perceptions are still positive, expectations are changing. Public higher education is seen increasingly as a private rather than a public good (Rosenstone, 2004). Colleges and universities are often seen as a ticket to financial security and economic status rather than serving a larger public purpose (Fallows, 2005).

Public opinion may be lagging the reality regarding public HEIs. Criticism regarding performance and results (Maeroff, 2005) is growing. It is hard to determine whether the performance of public HEIs is good or bad because they resist measurement (Mathews, 2005). Public HEIs have been able to blame failures on their students, unlike public primary and secondary schools (Wadsworth, 2005). Most defenses of public institutions of higher education rely on the same arguments; they have respected professors and brilliant students and do well in the rankings (Mathews, 2005). There is a perception that a college degree is now the key to the middle class, replacing the high school diploma. With this shift in perception, the public may expect these public HEIs to be subject to scrutiny similar to K-12 education (Wadsworth, 2005). On available measures such as expenditures per student, faculty salaries, teaching loads, and academic credentials for incoming students, the performance of public institutions has declined compared to private universities (Kane & Orszag, 2003). However, these indirect measures are far from ideal (Christ, 2004). Where public HEIs have information regarding performance, they often do not make it available publicly (Mathews, 2005). One reason for the decline in contributions from foundations may be a lack of measurable results (Marcy, 2003). Pressure has increased for public HEIs to demonstrate accountability by clearly defining goals and measuring results (Hersh & Merrow, 2005). Even three-fourths of public university presidents agree that colleges need to be more accountable for students' educational outcomes (Selingo, 2005).

2.3 Access

Public HEIs were intended to provide access to higher education for all sectors of the population. Public higher education was meant to be democratic, and it is a principle mechanism for making our social contract work (Yankelovich, 2005). However, cost recruitment strategies, financial aid, and demographics have combined to make public HEIs less accessible to many. While many public HEIs are committed to being accessible, they are also driven by forces that cause them to become more selective (Martin, 2005). As costs have increased and government funds have decreased, colleges have used different strategies for recruitment and financial aid to help ease the financial strain. Statistically, the best way to improve retention and graduation rates is to recruit middle and upper class students from suburban areas (Martin, 2005). Enrollment strategies such as these are often used to attract more affluent students (Hossler, 2004; Rosenstone, 2004). Financial aid policies have further aggravated this inequity. Need-based financial aid is a key to providing access for students of modest means. Financial aid policies, however, have shifted from primarily need-based to predominantly merit-based. These factors combine with changing demographics to deny access to those in lower socioeconomic strata, and certain minorities. Just as these factors diminish access for certain groups, those groups are growing significantly as prospective students.

3. THE MALCOLM BALDRIGE NATIONAL QUALITY AWARD CRITERIA AND PROCESS

The Malcolm Baldrige National Quality Award criteria and process represent a systematic approach to the implementation of the best established management practices. The process relies on an iterative process of organizational assessment and improvement. The criteria is non-prescriptive but comprehensive, covering leadership, strategic planning and implementation, customer focus, measurement, analysis and knowledge management, workforce focus, process management and results. Implementation is intended to direct and align management actions and decisions to address problems important to the organization.

3.1 Evolution of the process.

Legislation creating The Malcolm Baldrige National Quality award was signed into law in 1987. The criteria were developed in 1988, and represented a comprehensive quality system for manufacturing or service. Over time, there have been many changes both to the criteria and the applicants (Lee, Zuckweiler, & Trimi, 2006). By the late 1990s, the emphasis had shifted from quality systems to organizational performance (Evans & Lindsay, 2005). For the first decade, most of the applicants were from manufacturing. The remaining applicants were small business and service organizations (Baldrige, 2009). During this time, the criteria evolved through annual revisions to reflect a more comprehensive view of the role of quality as a management tool. The criteria came to reflect a broader systematic approach to management, which might be applied to organizations of any type. Also over time, many local quality award organizations arose and adopted the same MBNQA process, criteria, and similar procedures. In the 1990s interest grew in areas such as healthcare and higher education. Some healthcare and higher education organizations, while not yet included in the national award, began to apply for state awards by the mid 1990s. Baldrige criteria specifically for these areas were introduced in 1999, and the first national awards in education were granted in 2001 (Baldrige, 2009). These healthcare and education criteria were very similar to the traditional business and nonprofit criteria, but contained language more familiar to those who work in those sectors. These sectors became much more active in the Baldrige process after this addition. The majority of applicants now come from healthcare, followed by education.

3.2 The Baldrige Values

3.2.1 Education Criteria for Performance Excellence Goals

The Criteria are designed to help organizations use an integrated approach to organizational performance management that results in

- delivery of ever-improving value to students and stakeholders, contributing to education quality
- improvement of overall organizational effectiveness and capabilities
- organizational and personal learning

3.2.2 Core Values and Concepts

The Criteria are built upon the following set of interrelated Core Values and Concepts:

- visionary leadership
- learning-centered education
- organizational and personal learning
- valuing faculty, staff, and partners
- agility
- focus on the future
- managing for innovation

- management by fact
- social responsibility
- focus on results and creating value
- systems perspective

These values and concepts, described below, are embedded beliefs and behaviors found in high-performing organizations. They are the foundation for integrating key requirements within a results-oriented framework that creates a basis for action and feedback.

3.2.3 Visionary Leadership

Your organization's senior leaders should set directions and create a student-focused, learning-oriented climate; clear and visible values; and high expectations. The directions, values, and expectations should balance the needs of all your stakeholders. Your leaders should ensure the creation of strategies, systems, and methods for achieving excellence, stimulating innovation, and building knowledge and capabilities. The values and strategies should help guide all activities and decisions of your organization. Senior leaders should inspire and motivate your entire workforce and should encourage all faculty and staff to contribute, to develop and learn, to be innovative, and to be creative. Senior leaders should be responsible to your organization's governance body for their actions and performance. The governance body should be responsible ultimately to all your stakeholders for the ethics, vision, actions, and performance of your organization and its senior leaders.

Senior leaders should serve as role models through their ethical behavior and their personal involvement in planning, communications, coaching, development of future leaders, review of organizational performance, and faculty and staff recognition. As role models, they can reinforce ethics, values, and expectations while building leadership, commitment, and initiative throughout your organization. In addition to their important role within the organization, senior leaders have other avenues to strengthen education. Reinforcing the learning environment in the organization might require building community support and aligning community and business leaders and community services with this aim.

3.2.4 Learning-Centered Education

In order to develop the fullest potential of all students, education organizations need to afford them opportunities to pursue a variety of avenues to success. Learning-centered education supports this goal by placing the focus of education on learning and the real needs of students. Such needs derive from market and citizenship requirements.

A learning-centered organization needs to fully understand these requirements and translate them into appropriate curricula and developmental experiences. For example, changes in technology and in the national and world economies have increased demands on employees to become knowledge workers and problem solvers, keeping pace with the rapid market changes. Most analysts conclude that to prepare students for this work environment, education organizations of all types need to focus more on students' active learning and on the development of problem-solving skills. Educational offerings also need to be built around effective learning, and effective teaching needs to stress promotion of learning and achievement.

Learning-centered education is a strategic concept that demands constant sensitivity to changing and emerging student, stakeholder, and market requirements and to the factors that drive student learning, satisfaction, and persistence. It demands anticipation of changes in the education market. Therefore, learning-centered education demands awareness of development in technology and competitors' programs and offerings, as well as rapid and flexible responses to student, stakeholder, and market changes. Key characteristics of learning-centered education include the following:

- High developmental expectations and standards are set for all students.
- Faculty understand that students may learn in different ways and at different rates. Student

learning rates and styles may differ over time and may vary depending on subject matter. Learning may be influenced by support, guidance, and climate factors, including factors that contribute to or impede learning. Thus, the learning centered organization needs to maintain a constant search for alternative ways to enhance learning. Also, the organization needs to develop actionable information on individual students that bears upon their learning.

- A primary emphasis on active learning is provided. This may require the use of a wide range of techniques, materials, and experiences to engage student interest. Techniques, materials, and experiences may be drawn from external sources such as businesses, community services, or social service organizations.
- Formative assessment is used to measure learning early in the learning process and to tailor learning experiences to individual needs and learning styles.
- Summative assessment is used to measure progress against key, relevant external standards and norms regarding what students should know and should be able to do.
- Students and families are assisted in using self-assessment to chart progress and to clarify goals and gaps.
- There is a focus on key transitions such as school-to school and school-to-work.

3.2.5 Organizational and Personal Learning

Achieving the highest levels of organizational performance requires a well-executed approach to organizational and personal learning. Organizational learning includes both continuous improvement of existing approaches and adaptation to change, leading to new goals and/or approaches. Learning needs to be embedded in the way your organization operates. This means that learning (1) is a regular part of daily work; (2) is practiced at personal, work unit, department, and organizational levels; (3) results in solving problems at their source (“root cause”); (4) is focused on building and sharing knowledge throughout your organization; and (5) is driven by opportunities to effect significant, meaningful change. Sources for learning include ideas from faculty and staff, education and learning research findings, students’ and stakeholders’ input, best practice sharing, and benchmarking.

Improvement in education requires a strong emphasis on effective design of educational programs, curricula, and learning environments. The overall design should include clear learning objectives, taking into account the individual needs of students. Design must also include effective means for gauging student progress. A central requirement of effective design is the inclusion of an assessment strategy. This strategy needs to emphasize the acquisition of formative information—information that provides an early indication of whether or not learning is taking place—to minimize problems that might arise if learning barriers are not promptly identified and addressed.

Faculty and staff success depends increasingly on having opportunities for personal learning and practicing new skills. Organizations invest in personal learning through education, training, and other opportunities for continuing growth. Such opportunities might include job rotation and increased pay for demonstrated knowledge and skills. Education and training programs may benefit from technologies, such as computer- and Internet-based learning and satellite broadcasts. Personal learning can result in (1) more satisfied and versatile faculty and staff who stay with your organization, (2) organizational cross-functional learning, (3) building the knowledge assets of your organization, and (4) an improved environment for innovation.

Thus, learning is directed not only toward better educational programs and services but also toward being more adaptive, innovative, flexible, and responsive to the needs of students, stakeholders, and the market, as well as giving your faculty and staff satisfaction and motivation to excel.

3.2.6 Valuing Faculty, Staff, and Partners

An organization’s success depends increasingly on the diverse knowledge, skills, creativity, and motivation of all its faculty, staff, and partners. Valuing faculty and staff means committing to their satisfaction, development, and well-being. Increasingly, this involves more flexible, high-performance

work practices tailored to faculty and staff with diverse workplace and home life needs. For faculty, development means building not only discipline knowledge but also knowledge of student learning styles and of assessment methods. Faculty participation might include contributing to the organization's policies and working in teams to develop and execute programs and curricula. Increasingly, participation is becoming more student-focused and more multidisciplinary.

Organization leaders should work to eliminate disincentives for groups and individuals to sustain these important, learning-focused professional development activities. For staff, development might include classroom and on-the job training, job rotation, and pay for demonstrated skills. Increasingly, training, education, development, and organizational structure need to be tailored to a more diverse workforce and to more flexible, high-performance work practices.

Major challenges in the area of valuing faculty and staff include (1) demonstrating your leaders' commitment to the success of your faculty and staff, (2) providing recognition that goes beyond the regular compensation system, (3) ensuring development and progression within your organization, (4) sharing your organization's knowledge so your faculty and staff can better serve your students and stakeholders and contribute to achieving your strategic objectives, and (5) creating an environment that encourages creativity and innovation.

Education organizations need to build internal and external partnerships to better accomplish overall goals. Internal partnerships might include cooperation among leadership, faculty, and staff, such as agreements with unions. Partnerships with faculty and staff might entail faculty and staff development, cross-training, or new organizational structures such as high-performance work teams. Internal partnerships also might involve creating network relationships among your work units to improve flexibility, responsiveness, and knowledge sharing.

External partnerships might be with other schools, suppliers, businesses, business associations, and community and social service organizations—all stakeholders and potential contributors. Strategic partnerships or alliances are increasingly important kinds of external partnerships. Such partnerships might offer entry into new markets or a basis for new programs or services. Also, partnerships might permit the blending of your organization's core competencies or leadership capabilities with the complementary strengths and capabilities of partners.

Successful internal and external partnerships develop longer-term objectives, thereby creating a basis for mutual investment and respect. Partners should address the key requirements for success, means for regular communication, approaches to evaluating progress, and means for adapting to changing conditions.

3.2.7 Agility

Agility is an increasingly important measure of your organizational effectiveness. It requires a capacity for faster and more flexible response to the needs of your students and stakeholders. Many organizations are learning that an explicit focus on and measurement of response times help drive the simplification of the organizational structure and work processes. Empowered faculty and staff are vital assets in responding to today's changing and demanding environment.

All aspects of time performance are becoming increasingly important and should be among your key process measures. Other important benefits can be derived from this focus on time; time improvements often drive simultaneous improvements in organization, quality, and cost.

3.2.8 Focus on the Future

In today's education environment, a focus on the future requires understanding the short- and longer-term factors that affect your organization and the education market. Pursuit of educational excellence requires a strong future orientation and a willingness to make long-term commitments to key stakeholders—your community, employers, faculty, and staff. Your organization's planning should anticipate many factors, such as changes in educational requirements, instructional approaches, resource availability, student/stakeholder expectations, new partnering opportunities, faculty and staff development and hiring needs, technological developments, the evolving Internet environment, new

student and market segments, demographics, community/ societal expectations, and strategic changes by comparable organizations. Strategic objectives and resource allocations need to accommodate these influences. A major longer-term investment associated with your organization's improvement is the investment in creating and sustaining a mission-oriented assessment system focused on learning.

This entails faculty education and training in assessment methods. In addition, the organization's leaders should be familiar with research findings and practical applications of assessment methods and learning style information. A focus on the future includes developing faculty and staff, doing effective succession planning, creating opportunities for innovation, and anticipating public responsibilities.

3.2.9 Managing for Innovation

Innovation means making meaningful change to improve an organization's programs, services, and processes and to create new value for the organization's stakeholders. Innovation should lead your organization to new dimensions of performance. Innovation is no longer strictly the purview of research; innovation is important for providing ever-improving educational value to students and for improving all educational and operational processes. Organizations should be led and managed so that innovation becomes part of the learning culture and is integrated into daily work. Innovation builds on the accumulated knowledge of your organization and its faculty and staff. Therefore, the ability to capitalize on this knowledge is critical to managing for innovation.

3.2.10 Management by Fact

Organizations depend on the measurement and analysis of performance. Such measurements should derive from the organization's needs and strategy, and they should provide critical data and information about key processes and results. Many types of data and information are needed for performance management. Performance measurement should focus on student learning, which requires a comprehensive and integrated fact-based system—one that includes input data, environmental data, performance data, comparative/competitive data, data on faculty and staff, cost data, and operational performance measurement. Measurement areas might include students' backgrounds, learning styles, aspirations, academic strengths and weaknesses, educational progress, classroom and program learning, satisfaction with instruction and services, extracurricular activities, dropout/matriculation rates, and post-graduation success. Examples of appropriate data segmentation include segmentation by student learning results, student demographics, and faculty and staff groups.

Analysis refers to extracting larger meaning from data and information to support evaluation, decision making, and improvement. Analysis entails using data to determine trends, projections, and cause and effect that might not otherwise be evident. Analysis supports a variety of purposes, such as planning, reviewing your overall performance, improving operations, change management, and comparing your performance with comparable organizations or with "best practices" benchmarks.

A major consideration in performance improvement and change management involves the selection and use of performance measures or indicators. *The measures or indicators you select should best represent the factors that lead to improved student, operational, and financial performance. A comprehensive set of measures or indicators tied to student, stakeholder, and/or organizational performance requirements represents a clear basis for aligning all processes with your organization's goals.* Through the analysis of data from your tracking processes, your measures or indicators themselves may be evaluated and changed to better support your goals.

3.2.11 Social Responsibility

An organization's leaders should stress responsibilities to the public, ethical behavior, and the need to practice good citizenship. Leaders should be role models for your organization in focusing on ethics and protection of public health, safety, and the environment. Protection of health, safety, and the environment includes your organization's operations. Planning should anticipate adverse impacts that might arise in facilities management, laboratory operations, and transportation. Effective planning should prevent problems, provide for a forthright response if problems occur, and make available information and support needed to maintain public awareness, safety, and confidence.

Organizations should not only meet all local, state, and federal laws and regulatory requirements, but they should treat these and related requirements as opportunities for improvement “beyond mere compliance.” Organizations should stress ethical behavior in all stakeholder transactions and interactions. Highly ethical conduct should be a requirement of and should be monitored by the organization’s governance body.

Practicing good citizenship refers to leadership and support—within the limits of an organization’s resources—of publicly important purposes. Such purposes might include improving education in your community, environmental excellence, resource conservation, community service, and sharing quality-related information. Leadership also entails influencing other organizations, private and public, to partner for these purposes. Managing social responsibility requires the use of appropriate measures and leadership responsibility for those measures.

3.2.12 Focus on Results and Creating Value

An organization’s performance measurements need to focus on key results. Results should be used to create and balance value for your students and for your key stakeholders—the community, employers, faculty and staff, suppliers and partners, and the public. By creating value for students and stakeholders, your organization contributes to improving overall education performance and builds loyalty. To meet the sometimes conflicting and changing aims that balancing value implies, organizational strategy should explicitly include key stakeholder requirements. This will help ensure that plans and actions meet differing stakeholder needs and avoid adverse impacts on any stakeholders. The use of a balanced composite of leading and lagging performance measures offers an effective means to communicate short and longer-term priorities, monitor actual performance, and provide a clear basis for improving results.

3.2.13 Systems Perspective

The Baldrige Criteria provide a systems perspective for managing your organization and its key processes to achieve results—performance excellence. The seven Baldrige Categories and the Core Values form the building blocks and the integrating mechanism for the system. However, successful management of overall performance requires organization-specific synthesis, alignment, and integration. Synthesis means looking at your organization as a whole and builds upon key educational requirements, including your strategic objectives and action plans. Alignment means using the key linkages among requirements given in the Baldrige Categories to ensure consistency of plans, processes, measures, and actions. Integration builds on alignment so that the individual components of your performance management system operate in a fully interconnected manner.

These concepts are depicted in the Baldrige framework below. A systems perspective includes your senior leaders’ focus on strategic directions and on your students and stakeholders. It means that your senior leaders monitor, respond to, and manage performance based on your organizational results. A systems perspective also includes using your measures, indicators, and organizational knowledge to build your key strategies. It means linking these strategies with your key processes and aligning your resources to improve overall performance and satisfy students and stakeholders.

Thus, a systems perspective means managing your whole organization, as well as its components, to achieve success.

3.3. The Baldrige Criteria

The Baldrige Criteria include a set of core values reflective of high performing organizations and seven general categories, each containing more detailed items. The seven education categories are:

(1) leadership, (2) strategic planning, (3) student and stakeholder (customer and market) focus, (4) information and analysis, (5) faculty and staff (human resource) focus, (6) educational and support process management, and (7) school performance (business) results.

Applicants are scored and provided feedback on their “approach,” how well they address the item requirements; “deployment,” the extent to which the applicant’s approach is applied to all of the item requirements; and “results,” their outcomes in achieving the purpose of each item.

3.3.1 The Criteria focus on organizational performance results.

The Criteria focus on the key areas of organizational performance given below.

Organizational performance areas:

- 1) student learning results
- 2) student- and stakeholder-focused results
- 3) budgetary, financial, and market results
- 4) faculty and staff results
- 5) organizational effectiveness results, including key
- 6) internal operational performance measures
- 7) governance and social responsibility results

The use of this composite of measures is intended to ensure that strategies are balanced—that they do not inappropriately trade off among important stakeholders, objectives, or short- and longer-term goals.

3.3.2 The Criteria are nonprescriptive and adaptable.

The Criteria are made up of results-oriented requirements. However, the Criteria *do not* prescribe

- that your organization should or should not have departments for quality, planning, or other functions;
- how your organization should be structured; or
- that different units in your organization should be managed in the same way.

These factors differ among organizations, and they are likely to change as needs and strategies evolve. The Criteria are non-prescriptive for the following reasons:

- 1) The focus is on results, not on procedures, tools, or organizational structure. Organizations are encouraged to develop and demonstrate creative, adaptive, and flexible approaches for meeting requirements. Non-prescriptive requirements are intended to foster incremental and major (“breakthrough”) improvements, as well as basic change.
- 2) The selection of tools, techniques, systems, and organizational structure usually depends on factors such as organization type and size, organizational relationships, your organization’s stage of development, and faculty and staff capabilities and responsibilities.
- 3) A focus on common requirements, rather than on common procedures, fosters understanding, communication, sharing, and alignment, while supporting innovation and diversity in approaches.

3.3.3 The Criteria support a systems perspective to maintaining organization-wide goal alignment.

The systems perspective to goal alignment is embedded in the integrated structure of the Core Values and Concepts, the Organizational Profile, the Criteria, and the results oriented, cause-effect linkages among the Criteria Items.

Alignment in the Criteria is built around connecting and reinforcing measures derived from your organization’s processes and strategy. These measures tie directly to student and stakeholder value and to overall performance. The use of measures thus channels different activities in consistent directions with less need for detailed procedures, centralized decision making, or overly complex process management. Measures thereby serve both as a communications tool and a basis for deploying consistent overall performance requirements. Such alignment ensures consistency of purpose while also supporting agility, innovation, and decentralized decision making. A systems perspective to goal alignment, particularly when strategy and goals change over time, requires dynamic linkages among

Criteria Items. In the Criteria action-oriented cycles of learning take place via feedback between processes and results.

The learning cycles have four, clearly defined stages:

- 1) planning, including design of processes, selection of measures, and deployment of requirements
- 2) executing plans
- 3) assessing progress and capturing new knowledge, taking into account internal and external results
- 4) revising plans based upon assessment findings, learning, new inputs, and new requirements

3.3.4 The Criteria support goal-based diagnosis.

The Criteria and the Scoring Guidelines make up a two part diagnostic (assessment) system. The Criteria are a set of 19 performance-oriented requirements. The Scoring Guidelines spell out the assessment dimensions—Process and Results—and the key factors used to assess each dimension. An assessment thus provides a profile of strengths and opportunities for improvement relative to the 19 performance-oriented requirements. In this way, assessment leads to actions that contribute to performance improvement in all areas, as described in the shaded box above. This diagnostic assessment is a useful management tool that goes beyond most performance reviews and is applicable to a wide range of strategies and management systems.

For the adaptation of the Business Criteria for Performance Excellence to education, several important education concepts have been given careful consideration and are addressed throughout the Education Criteria.

3.3.5 Mission Specificity

Although education organizations typically share common aims, individual organizational missions, roles, and programs vary greatly. Use of a single set of Criteria to cover all your organizational requirements means that these requirements need to be interpreted in terms of your own organizational mission. This is necessary because specific requirements and critical success factors differ from organization to organization. For this reason, effective use of the Criteria depends on putting these mission requirements into operation consistently across the seven Categories of the Criteria framework. In particular, Strategic Planning (Category 2) needs to address your key mission requirements, setting the stage for the interpretation of your other requirements. For example, results reported in Organizational Performance

Results (Category 7) need to reflect results consistent with your organization's mission and strategic objectives.

The Education Criteria are most explicit in the area of student learning, as this requirement is common to all education organizations regardless of their larger missions. Despite this commonality, the focus of student learning and development depends on your organizational mission. For example, results reported by trade schools, engineering schools, and music schools would be expected to differ because they would reflect each organization's mission. Nevertheless, all three types of organizations would be expected to show year-to-year improvements in their mission-specific results to demonstrate the effectiveness of their performance improvement efforts.

3.3.6 Customers

The Business Criteria for Performance Excellence use the generic term "customers" to describe the users of products or services. Although market success depends heavily on user preference, other stakeholders must be considered as well when setting overall organizational requirements. In the Education Criteria, the focus is on students and stakeholders, the key beneficiaries of educational programs, offerings, and services.

As do businesses, education organizations must respond to a variety of requirements—all of which should be incorporated into responses to the Education Criteria. The adaptation of the Business Criteria to education includes a specific approach for defining key student requirements. This

approach distinguishes between students and stakeholders for purposes of clarity and emphasis. Stakeholders include parents, employers, other schools, and communities. The requirements for current students differ from those for future students. Requirements for current students are more concrete, specific, and immediate; determining requirements for future students is part of the organization's planning and should take into account changing student populations and changing requirements future students must be able to meet. A major challenge organizations face is "bridging" current student needs and the needs of future students. This requires an effective organizational learning and change strategy.

Education organizations must also address the variety of requirements of their various stakeholders. Stakeholders' requirements are of two types: (1) requirements directly related to your organization's educational services and (2) requirements of the stakeholders themselves. For example, parents might request services related to their children's educational program, such as integration of math and science curricula (type 1), and the parents might also request special meeting times with the school to accommodate their work schedules (type 2). Many of the needs of businesses and other stakeholders are actually needs that must be addressed in your organization's educational services for students. The Education Criteria place primary emphasis on such needs because your organization's success depends heavily on translating these needs into effective educational services and experiences. In addition, successful operation of an organization may depend on satisfying accreditation, environmental, legal, and other requirements. Thus, meaningful responses to the Criteria need to incorporate all relevant requirements that organizations must meet to be successful.

3.3.7 Concept of Excellence

The concept of excellence built into the Criteria is that of "value-added" demonstrated performance. Such performance has two manifestations: (1) year-to-year improvement in key measures and indicators of performance, especially student learning, and (2) demonstrated leadership in performance and performance improvement relative to comparable organizations and to appropriate benchmarks.

This concept of excellence is used because (1) it places the major focus on teaching and learning strategies; (2) it poses similar types of challenges for all organizations regardless of resources and incoming student preparation and abilities; (3) it is most likely to stimulate learning-related research and to offer a means to disseminate the results of such research; and (4) it offers the potential to create an expanding body of knowledge of successful teaching and learning practices in the widest range of organizations.

The focus on value-added contributions by your organization does not presuppose manufacturing-oriented, mechanistic, or additive models of student development. Also, the use of a value-added concept does not imply that your organization's management system should include documented procedures or attempt to define "conformity" or "compliance." Rather, the performance concept in the Education Criteria means that your organization should view itself as a key developmental influence on students (though not the only influence) and that your organization should seek to understand and optimize its influencing factors, guided by an effective assessment strategy.

3.3.8 Assessment Strategy

Central and crucial to the success of the concept of excellence in the Education Criteria is a well-conceived and well-executed assessment strategy. The characteristics of such a strategy should include the following:

- Clear ties should be established between what is assessed and your organization's mission and objectives. This means not only what your students know but also what they are able to do.
- There should be a strong focus on improvement—of your students' performance, your faculty's capabilities, and your organization's performance.
- An embedded, ongoing assessment with prompt feedback should be an integral component.
- The assessment also should be based on curricula, reference appropriate criteria, and address your

key learning goals and your overall performance requirements.

- Clear guidelines should be established regarding how your assessment results will be used and how they will not be used.
- There should be an ongoing evaluation of your assessment system itself to improve the connection between assessment and student success. Success factors should be developed on an ongoing basis based on external requirements such as those derived from your markets and from other organizations.

3.3.9 Primary Focus on Teaching and Learning

Although the Education Criteria framework is intended to address all organizational requirements, including research and service, primary emphasis is placed on teaching and learning. This is done for three main reasons:

- 1) Teaching and learning are the principal goals of education organizations. Thus, sharing successful teaching and learning strategies and methods would have the greatest impact on improving the education organizations.
- 2) Those who encouraged the creation of a Baldrige Award category for education cited improvement in teaching and learning as their primary or only rationale for such an award.
- 3) Only a small percentage of education organizations engage in research. Peer review systems exist to evaluate research. Funding organizations and businesses provide avenues to channel the directions of much research. Numerous excellent forums and media already exist for sharing research results. Much of the research performed in education organizations involves students as part of their own overall education.

Thus, the educational role of research is incorporated in the Education Criteria as part of teaching and learning. Other important aspects of research—faculty development and student and faculty recruitment—are also addressed in the Criteria.

The Education Criteria for Performance Excellence have evolved significantly over time to help education organizations address a dynamic environment, focus on strategy driven performance, and, most recently, address national concerns about governance and ethics. The Education Criteria have continually progressed toward an integrated systems perspective of overall organizational performance management.

The Baldrige Criteria provide educators with the basic tools for implementing quality principles. The Criteria form the generic building blocks of performance excellence which can be tailored to the unique characteristics of any organization. They allow leaders at all organizational levels to:

- develop systemic thinking habits;
- define the customers and goals of the organization and its parts;
- analyze the performance of the organization and its parts against a common metric;
- initiate a strategic planning process for improvement;
- define measures to track performance against the goals;
- base decisions on data and analysis;
- provide greater authority, information and training to front line staff to create success
- support a climate of continuous improvement.

4. SUMMARY

The purpose of this article was to provide a review of the literature to establish broad consensus on the important challenges confronting public higher education today, mainly cost, accountability, and access.

The article also described the history of the MBNQA process, and its evolution. A summary of the broad use of the MBNQA process was presented with emphasis on the educational aspect. Trends in the use of the MBNQA process indicate that use of the criteria and process by public HEIs has continued at relatively low levels throughout the last decade. Therefore, understanding the process and its implementation may serve as an important strategic management tool for HEIs' continuous improvement efforts and as a tool for coping with the external and internal challenges.

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