Quality in Community College Libraries

PHILIP TOMPKINS

ABSTRACT

Academic libraries in two-year higher education institutions devoted exclusively to teaching and learning (community colleges) present an unexpected contrast to those quality issues that are anchored in traditional quantity-based (ACRL) standards rather than on the expectations and values of library users and those seeking to learn. Community college libraries may fit the new quality paradigm if several conditions are fulfilled: (1) quality is a campuswide initiative; (2) the convergence of the print-based and digital cultures is reckoned with; (3) library spaces are designed or redesigned as spaces correlative to the classroom with resources, staff, and services that support interactive learning styles; and (4) the colleges find a way to discover a quality-based model that challenges the long acknowledged missing organic relationship between the classroom and the library's role in support of independent lifelong learners.

INTRODUCTION

This article represents an effort to transcend, though not dismiss, the barometers of quality that have prevailed for the past seventy years in American academic and research libraries, especially libraries attached to two-year institutions devoted exclusively to teaching and learning, be they publicly or privately owned and operated.

It begins with summary sketches provided by current social constructionist understanding of change in American society, in higher education, and in the traditional information enclaves—i.e., academic libraries.
It proceeds to contrast traditional quality definitions with those of Total Quality Management (TQM). It highlights the newly proposed Malcolm Baldrige National Quality Award for Education. It identifies the transition of quality initiatives from the world of business to the teaching/learning academy with its necessary manifestation first as a collegewide initiative, subsequently surfacing within functional areas such as the library. It describes how community college libraries may fit into this new paradigm and notes impediments to quality initiatives currently reported, including the dotted line relationship between the classroom and the integrated library/high technology centers that are emerging. It calls for a new model that takes into consideration the converging culture of the printed word and digitization heralded as the Information (now Infomedia) Age (Lanham, 1993b). The reorientation and reorganization of community colleges and their libraries are seen as systemic changes incorporating the best of the traditional with the new, as yet unheard, voices at the center of the educational endeavor, the students.

QUALITY AS TRADITIONALLY DEFINED

Community college libraries, until fairly recently, have been collections of the product of the Gutenberg technology—i.e., the printed book and its derivatives. Quality issues and their corresponding official measurements relative to accreditation and the work of associations of information professionals have reflected the dominant Gutenberg culture and the work environment it has created. These issues delineate the great division between the community college classroom and the library.

In the past decade, dramatic, rather than incremental, change has characterized higher education and its libraries. This article acknowledges not only the introduction of electronic information products but the convergence of the older culture of the book with the emerging culture of digital resources. That convergence inevitably has consequences, consequences for the understanding of, and measurement of, quality in these libraries or information enclaves.

The tension between the developing information technologies culture and teaching and learning cultures continues to intrude when quality is discussed. At the same time, higher education, once considered a citadel of orthodoxy and an arbiter of what is of value in society, has been challenged on grounds of poor quality, most notoriously, poor quality in what higher education claims it does better than anyone else—the role of enabler of student learning.

That challenge has come from several quarters—from the business community, from the world of work transitioning from the industrial age model to that of the information age, from the larger and larger number of nontraditional students "unprepared" to succeed in the nineteenth-century-modeled academy, and most recently from the increasingly pervasive process known as quality management.
Quality Reconceived

One underlying imperative of the quality movement is the painful, laborious, step-by-step rediscovery of the bonds of humanity and collegiality within any societal endeavor, large or small, profit or nonprofit, educational or commercial. Natural collaborative human behavior has been suppressed by the hierarchical model on which church and state, business and education, the public and private sectors have been modeled in Western society. The quality movement and the issues it annoyingly raises are remarkable—remarkable because of their relevance to all types of institutions.

Quality for libraries in organizations dedicated exclusively to teaching and learning means first of all overcoming the domination of the Gutenberg culture and the academy-based discrete departments and related professional associations that have collaborated to support, define, and control what is authoritative information, authoritative knowledge, and authoritative teaching and learning. It means transcending, though not abandoning, the print-based culture of traditional literacy to include the emerging culture of the independent lifelong learner.

A Different Order

What is being challenged both indirectly and directly is the normative order of the world of teaching and learning and derivatively the order of the world of information as perceived by the academician. The temptation, of course, is to scuttle traditional structures and their inherent quality and measurement systems without planned substitutions or replacements. The tension between conserving what is good and embracing what is new remains unabated. The tension is in part reflected in the redesign of information spaces to create new integrated library/high technology centers. Educational institutions are expected to accommodate and participate in this transition if they are to prevent further erosion of their leadership in the education marketplace.

At the same time, educational institutions are under no obligation to affirm the potential anarchy associated with the emergence of the virtual electronic culture. Rather, they may be called upon to associate themselves with practitioners of the quality movement, beginning most profitably with those who have successfully pioneered its processes. In the short run, this probably means both creating new environments whose impact and effectiveness must be measured and inventing the measurement instruments themselves or at least adapting them from quality practitioners in the world of business.

First of all, one must deal with the metaphors that define the way one approaches working as an information professional. While dealing with the metaphors, one must also deal with the stereotypes that the profession has wittingly or unwittingly won for itself—stereotypes that typically have a grain of truth within them. Instead of striving for an idealized
level of "objectivity," one is asked to look at teaching and learning from the perspective of the broader society and from the perspective of students who have a wide range of learning styles.

**TIES THAT BIND**

Our understanding of the information profession and the role of libraries is ultimately influenced by the institutions to which they have been attached. Historically, these institutions of teaching and learning have defined the roles and missions of academic libraries. From the academy, libraries have received their charter as well as the standards and roles on which they are judged to be successful or unsuccessful. It has been a fairly comfortable world given the expansionist history of higher education since World War II. But that world has since exploded into many worlds. Some define it as chaos, using the classical metaphor. Others have found a new order in the fractal world of chaos and have given it an amelioristic connotation, one suggesting its own type of order yet without the lockstep uniformity associated with the traditional definition.

To put it in another way, practitioners in the teaching/learning academy are merely part owners in the world of independent lifelong learning. They are fellow travelers along with a host of practitioners and customers who are in fact defining the conditions under which teaching and learning and the use of information are practiced. Both providers and consumers are, in a most profound sense, becoming virtually indistinguishable with respect to defining the content and delivery systems of higher education.

Through interactions with others in American society, information professionals are being asked to reconsider the stock of languages, myths, symbols, and values of their professional heritage. Their world is being profoundly reshaped by real and virtual cultures, by professional and business cultures, by the culture of the common man and woman, and by the community of nontraditional lifelong learners. The latter are those who have learned not from the academy but from the multimedia cultures in which they actually live. The academy is bypassed, to some degree, in authenticating new ways of using information and transforming it to knowledge. However, the academy and its libraries may also be beneficiaries of these new media of learning.

**QUALITY BASED ON QUANTITY**

Quality in community college libraries has, in this century, followed a set of standards developed for, and derived from, the standards for academic and research libraries. There was and is a commonality among these sets of standards (Association for College and Research Libraries, 1995). The standards address, first of all, space for the objects gathered, which represent the resources essential to teaching and learning. In the case of universities, research endeavors tended to be a major consider-
ation that overshadowed the needs of the undergraduate. The standards addressed differentiation among collections depending on the variety of programs to which the institution was committed and the level of educational attainment of its students.

Libraries were expected to provide space for students and faculty to pursue knowledge. Spatial allocations were based on the projected enrollment of the institution. The requirements of colleges and universities with residential populations and, subsequently, commuter students were taken into consideration. Ratios were established between professional and support staff and between the staff and the total student enrollment.

As the community college movement developed, librarians naturally looked to four-year colleges and universities in establishing their own standards for inventory, staff, and patron space requirements; library services; and other amenities related to creating a pleasant supportive environment for teaching and learning. Audiovisual resources in their pre-multimedia stage were allocated with requisite space and staff similar to those provided for print collections. Yet these resources were not only decidedly different because of their formats but also because of their implications for service and their use in classrooms as well as by individual students. With the evolution of the media center culture (and the associated concept of learning resource centers) to the world of digitization and distance learning, yet another reconsideration of the storage, staffing, and dissemination standards and practices is required. All in all, quality had been estimated on the basis of quantity of one type or another in relation to objects or service to patrons and/or enrollments. A commentary by Parker (1994) on the foundations of the most recent Standards for College Libraries offers a convenient summary of the importance of those standards to twentieth-century North American libraries. At the same time, the article gingerly approaches, but does not address, the relationships between those well-conceived quantifiable standards and the significant challenge the quality movement presents to such standards. By far the most balanced comprehensive discussion of standards, quantity, and quality issues is the Coleman and Jarred (1994) discussion of the relationship between these matters and the country's several regional accrediting agencies.

DEDICATION TO "SERVICE"

The behavioral quality of the library organization was initially defined through the intermediacy of schools of library and information science. It may best be summarized by dedication to public service that was, and continues to be, the hallmark of the profession.

The organizational expression of much of this dedication to service derived from common sense arrangements of resources and services. The challenge has always been to provide resources and services for the present
and to make provision for the growth of book stock, enrollment, and the introduction of new technologies (academic and research libraries were, until recently, the leaders in the introduction of technology in higher education). The accomplishments of the builders of academic and research libraries of twentieth-century North America is a story that will continue to be told, inspiring the respect, if not the awe, that it deserves. Yet times have changed. Although some traditional facilities continue to be planned and erected, centered as they are on the principal product of the Gutenberg technology, increasing numbers of integrated libraries/high technology facilities are beginning to appear based on the new culture of information technology.¹

FOCUS ON QUALITY: A TECTONIC SHIFT

But quality in these newer community college-integrated facilities is not a story ready for the telling; its literature remains to be written. Nevertheless, a tectonic shift has taken place, dislocating what had been perceived to be the rock bottom standards of quality for libraries in higher education.

The “new” quality movement did not come from the information profession. Neither did it come from the precincts of higher education. It came from the American business community and its attempt to respond to new standards of quality developed in Japan. The adoption of those standards by higher education and that segment of higher education responsible for three quarters of the undergraduate enrollment nationally, the community college, is in an incipient phase.

Even if there were a sizable literature on quality improvement in community college libraries (which there is not), it would in some peculiar sense not be a narrative exclusively about the “library.” The quality imperative for the community college library is part and parcel of the development of a new paradigm of management for the entire college with intersecting cross-functional teams that transcend the library as a separate entity within the college itself.

DEVELOPMENTS IN THE FIELD

By October 1994, 415 schools, colleges, and universities were using Total Quality Management, an increase of 43 percent over the previous year as reported in Fortune (1994). As this article was being composed, The Chronicle of CQI (1994) appeared on periodical subscription lists. The first issue of this newsletter described the application of the Malcolm Baldrige National Quality Award to educational institutions. The Baldrige Award was established in 1987 and has had twenty-two winners out of a possible 10 million candidates. “The Award promotes an understanding of quality excellence, greater awareness of quality as a crucial competitive element, and the sharing of quality information and strategies” (Chronicle of CQI, 1994, p. 1).
On December 16, 1994, the National Institute of Standards and Technology (NIST) announced the launching of the Malcolm Baldrige National Quality Award Education Pilot Program. It was the hope of the initiators of this program to smooth the way to facilitate continuous quality improvement applications from the world of business to the world of higher education. "The school prize, to be issued for the first time in 1996, will recognize excellence in the hallmarks of TQM: constant improvement and better results, from higher test scores to lower dropout rates. Judges will look for evidence that students are benefiting, not just that the school is teaching TQM principles" (Business Week, 1994).

Before evaluating and reporting on efforts within community colleges and community college libraries, the proposed Baldrige National Quality Award Education Pilot Criteria will be briefly described (Chronicle of CQI, 1995):

**Leadership**—examines senior administrators' personal leadership and involvement in sustaining a student's focus, clear goals, high expectations, and a leadership system that promotes performance excellence. Also examined is how these objectives and expectations are integrated into the school's management system.

**Information and Analysis**—examines the management and effectiveness of use of data and information to support overall mission-related performance excellence.

**Strategic and Operational Planning**—examines how the school sets strategic directions and how it determines key plan requirements. Also examined is how the plan requirements are translated into an effective performance management system with a primary focus on student performance.

**Human Resource Development and Management**—examines how faculty and staff development are aligned with the school's performance objectives. Also examined are the school's efforts to build and maintain a climate conducive to performance excellence, full participation, and personal and organizational growth.

**Educational Business Process Management**—examines the key aspects of process management, including learning-focused education design, education delivery, school services, and business operations.

**School Performance Results**—examines student performance and improvement, improvement in the school's education climate, school services, and improvement performance of school business operations. Also examined are performance levels relative to comparable school and/or selected organizations.

**Student Focus and Student and Stakeholder Satisfaction**—examines how the school determines student and stakeholder needs and expectations. Also examined are levels and trends in key measures of student and stakeholder satisfaction and satisfaction relative to comparable schools and/or appropriately selected organizations.
These criteria have been delineated because they contrast significantly with those that have traditionally been applied to higher education (and libraries). Accreditation criteria represent minimum standards of operation whereas the criteria suggested by the Baldrige Award have overall excellence as their goal.

On April 27, 1995, Steve Brigham, of the American Association for Higher Education, sent an electronic communication to subscribers to the CQI listserv giving, in twenty-four pages, the responses of participants in the training program to prepare approximately fifty educators to serve as evaluators for the 1995 Baldrige Education Pilot Program (Brigham, 1995). He asked a number of the evaluators for their immediate impressions of the strengths, challenges, and concerns about the Baldrige educational criteria by responding to three questions:

1. What are the elements of the Baldrige in education criteria, as currently constructed, that you believe are of the greatest use if employed as a self-assessment tool?
2. What are the elements of the Baldrige in education criteria, as currently constructed, that you believe will be the most challenging or difficult for education organizations if used as a self-assessment tool?
3. What are your greatest concerns about the Baldrige in education criteria as currently constructed (you may include items beyond its use on campus—for example, its use as an award program) (Brigham, 1995, pp. 1-2)

The project's leadership intends to evaluate these and other responses to the criteria and to modify them again before the program officially begins this year. Eleven evaluators responded, representing a range of colleges and universities. The comments are enlightening, encouraging, diverse, and clearly indicate how arduous the journey will be for those committed to achieving educational excellence.

COLLEGE-WIDE INITIATIVE

The movement for quality in a community college is a total process which is broader than, though not exclusive of, quality initiatives in functional areas such as the library. The profile of the literature shows this characteristic even as it reflects the fact that the quality movement in community colleges and their libraries is not well advanced in many institutions. As several writers have pointed out, the commitment to quality must be first and foremost a collegewide initiative. This is perhaps the most critical step in an institution's journey toward quality improvement.

First, as one might expect, there is much more literature about experiments with Total Quality Management on a collegewide basis than there is of experiments with it on a library basis (Hertzler, 1994; Schauerman, 1994; Spanbauer, 1995; Wolverton, 1993; Thor, 1992;
Given the size of many community college libraries, to refer to a librarywide TQM initiative is somewhat of a misnomer; to use this term to comment on such an initiative at a large research university library may be more appropriate although it too conveys a "stand alone" posture which total quality initiatives belie.

Second, there are articles that reflect the notion of quality which one might call pre-TQM, quality understood as a call for improvement of internal processes within the library without any direct relationship to customer service, much less any suggestion that customer needs might provide a framework for the dramatic shift in perception and methodology characteristic of the quality process (Hayes & Brown, 1994; Shapiro, 1991; Segal & Trejo-Meehan, 1989; Hawkins, 1989; Lowell & Sullivan, 1989; Clayton, 1989; Cooper, 1986; McIlwain, 1986; Sell & Mortola, 1985). Quality circles are included in this category.

Next, one finds general calls for the implementation of quality and summaries of the ideas of TQM as they might apply in academic libraries (Riggs, 1993; Shaughnessy, 1993, 1987) followed by reports of the introduction of quality processes in academic libraries as a whole (Butcher, 1993; Fitch et al., 1993; Jurow & Barnard, 1993; Neal & Steele, 1993; Mackey & Mackey, 1992) and its introduction into specific functional areas (Brown, 1994; Clack, 1993). These are reports of library initiatives for quality which, for the most part, treat the library as a discrete entity seemingly untouched by the institutionwide quality initiative. This seems to be characteristic of larger organizations, especially university libraries. It is rare to find a community college library quality initiative written about in this way. This is not to say that the former are insignificant. Rather, it suggests that they are rarely reported against the background of a total institutional initiative and therefore, in a sense, leave an impression that is somewhat at odds with quality as defined by Deming (1986), Juran (1974), and Crosby (1984). This is in part because of the size of the academic libraries reporting and the size of the institution of which they are a part—and because that is "just the way things have always been done."

One of the most interesting examples of the introduction of a quality environment was the creation in November 1994 of the Computer-Based Services and Resources Team (CBSRT) at Indiana University Bloomington (IUB). It is important because the team was presented with the opportunity to work in tandem with University Computing Services to create cross-functional teams, as necessary, in an attempt to address a wide range of customer-focused digital initiatives. At the same time, this effort was viewed as "an organizational experiment, capitalizing on the decreased hierarchy and increased flexibility of the IUB libraries" (Bobay, 1995, p. 2). The CBSRT exhibits a prototypical approach to digital information issues and should be of interest to any type of academic library, including com-
munity college libraries, as they reach beyond their traditional confines to collaborate as peers with information technologies (IT) professionals on a campus or within a community college multicampus system. Of the four quality initiatives at IUB, the CBSRT exhibits the type of cross-functional partnerships that is characteristic of most quality initiatives.

QUALITY AS SYSTEMIC
To attempt to interpret why the reports of TQM in community college libraries remain relatively sparse, several possible factors come to mind. The history of the "organic transplant" of Management by Objectives (MBO) from the world of business to the world of education is not the process by which a commitment to continuous quality improvement may gain a foothold in higher education. In fact, it may be antithetical to the quality movement. The former required a regimentation that was easily ordered and confirmed by the reigning hierarchical organization model still dominant in higher education. It was just as easy for the physical plant staff to adopt MBO as it was for the library or any other academic unit. MBO was basically the business of the unit adopting it; the results were ensured to be attractive to management while requiring little, if any, overall or systemwide effort.

Quality management, on the other hand, represents a systemic change that must begin with the commitment of an organization's top management to empower staff, eliminate bureaucracy, and focus on the customer. One feature of such a transition is sometimes depicted as a change from the pyramid to clusters of overlapping concentric circles. This is not to say that efforts at understanding quality initiatives and putting them into practice has not or should not happen here and there within an organization. Where they happen, they are to be applauded. The etiology of the systemic change that quality management requires, however, is beyond the capability of any discrete unit or group of individuals in an organization. Such efforts tend to wither and die under the pressure of the dominant culture in higher education, which often remains structurally at variance with the values of total quality management.

HOW LIBRARIES FIT IN
As a general statement, one finds that community college libraries tend to be included implicitly in the institutional adoption of a quality initiative without the reportage noted earlier for academic libraries attached to four year colleges and research universities. This is certainly the case for the ten colleges that constitute the second largest community college district in the country (Hertzler, 1994a) and is reflected in the survey of the community college literature conducted by Hertzler (1994b) in her doctoral dissertation, An Evaluation of the Implementation of TQM at Rio Salado Community College: A College without Walls.
The way people work together is what produces excellence, and these processes often determine the quality of an organization's products. As Rhodes (1992) writes: "It's becoming clearer to me that the power of Total Quality Management concepts of Deming and others derive (1) from their psychological and value-driven base, and (2) from their 'totalness.' They deal with an organization's work processes as a single system" (p. 76). In a similar vein, Cross calls for the involvement of faculty in quality initiatives and points to Robert McCabe, president of Miami-Dade Community College, as the prototype of a TQM leader who has fostered wide faculty and staff participation in quality improvement processes (Cross, 1993, 1987). While quality initiatives must start at the top, they cannot be imposed. Nor can they be successful without an eventual reorganization of the college, beginning with what happens in the classroom and with the learners.

**Impediments to Quality**

Community colleges, like so many other educational organizations, have experienced the dissonance and dichotomy of energies and directions. "The prevailing organizational paradigm has all the characteristics of a dysfunctional family" (Rhodes, 1992, p. 76). In public forums, every educational institution wishes to be perceived as promoting "what's best for the students." The problem and fundamental weakness of this putative common focus is that faculty, staff, administrators, and students all make decisions in isolation from one another. Everybody decides what is best for students without consulting one another or the students (customers). There are two parallel systems operative in the organization, "one we control through planning and operational management decisions to achieve the results we want. The other 'system' is composed of all factors that influence the results we get, whether or not we can control them" (Rhodes, 1992, p. 77).

Deming attempts to give organizations the tools to bring the "two systems" together. Rhodes (1992) summarizes Deming's contentions:

His concepts about systems confront what we believe about the lack of interdependency in organizations. His thoughts about people as psychological beings intrinsically motivated to want to be effective in their work, force one to apply to others a principle that some of us may think applies only to ourselves. His demonstration that management's processes are the causes of up to 90 percent of the variation in outcomes and results in any system, challenge directly our attempts to improve schools through monitoring of results, then assigned blames, and trying to fix individuals. His theory of knowledge forces awareness of humans as cognitive beings trying to construct knowledge from experience within frames provided by theories and beliefs. Finally, because TQM is a process designed to make continual improvement a fact of organizational life, it has been natural to attempt to contrast it with other "improvement" strategies such as Outcome-Based Education, Effective Schools, Accelerated Schools, and Essential Schools. (p. 79)
TQM, in summary, is not just another "management technique" easily transferable from the business sector to the educational sector. Long-term evidence of involvement in community college libraries with continuous quality improvement initiatives may emerge eventually from the general literature of community college efforts to become Total Quality Management institutions (Coady, 1994; Knowles, 1994; LeTarte, 1994; Entner, 1993; Schauerman & Peachy, 1993; Hudgins, 1993; Burgdorf, 1992; Seymour, 1991; Marchese, 1991).

A ROCKY ROAD

One of the important issues in the TQM movement from the workplace to the school is the growing understanding of the differences in the organizational structures. Colleges and universities, because of their peculiar organizational components, have greater autonomy resident in segments of the organization than businesses do. Hence, the strategies for leading and transforming a college into a quality organization differ and must be experimented with. However, there is a growing sense of urgency among higher education institutions to improve and to more effectively address the needs of society. Educational leaders are beginning to write insightful comments on their experiences as they participate in the transformation of community colleges. Reflective comments on the behavioral interactions, the "how we should have," and "if we had only known," and "how I changed my behavior" (by a college president) are available. They suggest the characteristics of a changing organization after it has embarked on the path toward quality (Brown et al., 1994; Thor, 1994; Van Allen, 1994; LeTarte, 1993).

The commitment to quality often requires the examination of the relationships among functional units in the organization. In this case, reference is made to the relationship of information professionals and their unit and to the instructional process—that is, to teaching and learning. One of the more succinct comments on what libraries have missed (community college libraries included) was made by McGrath (1993):

> From the literature of total quality management, and the associated literature of quality control, we learn that, for processes, quality is defined in terms of conformance to specifications and that, for services, quality is best defined by someone else—that is, the customer. Specifically, quality is defined as conformance to expectations. Does the product conform as specified and to customer satisfaction? In libraries, we have long known what the product is (service) and who the customers are (users). Inexplicably, after all these years, we have not learned how to feed back user satisfaction in any systematic way. (pp. 195-96)

It might well be appropriate at this point to reflect on the research on the traditional mode of delivery (the classroom lecture) and compare that with the research alluded to in Twigg's telling comments. In speaking
of the Myers-Briggs Type Indicator (MBTI), Twigg notes the four patterns of preferred learning styles: ES (concrete active), IS (concrete reflective), EN (abstract active), and IN (abstract reflective).

Recent studies have shown that the largest group of college students consists of concrete-active learners, who learn best from concrete experiences that engage their senses, that begin with practice and end with theory, and so on. As Schroeder recently pointed out in Change magazine, the overwhelming majority of college faculty prefer the IN (abstract-reflective) pattern, creating an increasing disparity between teacher and learner. (Twigg, 1994, p. 24)

Realistically, one of the well-known reasons why libraries may not be positioned to participate in the quality movement within their organizations is Boyer’s (1988) finding that the college library is still not a significant force in the education of undergraduates.

THE DILEMMA

Despite the proliferation of technologies making access to information worldwide through the Internet and other wide and local area networks, academic libraries and the information resources and services they offer do not enjoy a systemic relationship to teaching and learning in the contemporary community college. The older quantitative standards (reduced to such familiar items as the size of inventory and the ratios of staff to students, and of study space as related to enrollment) and persistent and often heroic efforts at “bibliographic instruction” have at best an informal serendipitous relationship to the creation of independent lifelong learning in the Infomedia Age.

There are factors within and without the community college that make the integrative nature of the quality movement urgent, possible, and desirable. The academy is under fire. It does not do what it is supposed to be able to do better than any other institution—i.e., teaching that results in independent lifelong learning. An intense commitment to quality remains a systemic remedy for the resolution of this problem.

Faculty and the textbook are no longer perceived as the primary source of education. The multiplicity and the richness of real and virtual information resources are continually expanding. The Infomedia Age has brought qualitative and quantitative change to the society in which students live. The dissemination of information throughout society makes the uniqueness of the individual instructor (and the textbook) as primary sources of knowledge on a subject symbols of a past age. Libraries are not positioned to contribute to the teaching and learning processes to the extent that they are unable to integrate and deliver needed information. They are sentinels and custodians of information resources, but
often they are not members of the instructional teams that link the classroom with the workstation environment where students manipulate, customize, and create knowledge. One of the more perceptive writers on the changing role of the library is Lanham (1993):

Digitized information is immanent, not physically placed, and, unlike the book, can be given away and kept at the same time. In a world of databases, the library with the most units no longer wins. At the same time, the dispensing of information, the new economics of human attention, becomes central. In an information-rich world where human attention is the scarce commodity, the library's business is orchestrating human attention structures. This is an active, not a passive function....The design of human attention structures demands a great deal of it....And so the library begins to reinvent itself around the metaphor of "gateway." It seems to me, at least, that this gateway must be an active, imaginative creation, one integrally related to the process of instruction in a fundamentally different way from a collection of books awaiting the student's call slip. (pp. 11-12)

To someone following closely the processes of quality management, Lanham's comments suggest the reappraisal of the way in which community college libraries (and other academic libraries) relate to their teachers and students. Customer service, internal customer service, adjustment of the processes for access to information, lessening the preoccupation with tending the book stock and its physical integrity, turning to the actual time constraints under which community college students learn (half of whom are over thirty years of age and working full time), and fashioning staff routines and services to acknowledge the variety of resources readily available and relevant to each course/section are the tasks at hand. All of this suggests a concern for quality carefully calculated to support those most critical and defining of human endeavors—teaching and learning.

The interdependence of the community college's information enclave and the practitioner in the classroom (and now the Information Commons) is currently beginning to be acknowledged but not widely realized in a systemic manner. The classic bibliographic culture does not have the agility to accommodate a new model for service to the student, one built, as suggested elsewhere by Lanham, on "a new economics of human attention"—in contrast to the prevailing model designed for the student in pursuit of a postgraduate degree.

"In an information economy, the central scarce resource is not information—we are drowning in that—but human attention. It is human attention that gives information meaning and direction" (Lanham, 1993, p. 1). The movement of alphabetic information from a printed
surface to a digital electronic space is the foreground in which the learning community can acknowledge the dynamics that should exist between learning activities initiated in the classroom and integrated library/technology centers. The metaphoric four walls of the classroom can no longer "contain," much less limit, access to the world of information. New roles for instructional teams led by community college faculty may produce these dynamics as librarians collaborate in acknowledging the new model for learning that transcends the classroom space and catapults learners into technology-intensive spaces, especially libraries—at least those libraries that are created or renovated to become learning centers.

Following the alphabet from printed page to the color monitor presents a panoply of quality issues directly related to the creation of different types of learning communities—learning communities that are truly centered on the learner. And the role of the information professional? Community college librarians, perhaps more than any other type of information professionals, serve not only the transition of students from their teens to their twenties but also the transition of adults re-entering teaching institutions or entering them for the first time as their occupational needs dictate. Community college librarians have the laboratory, unfettered by the demands of research priorities, in which to discover new roles, resources, and services for the quite diverse student populations—diverse culturally and ethnically, diverse by age, by preparation, by gender, by the expectation to be able to learn with a variety of traditional and electronically supported learning styles. No one has sketched the opportunities more invitingly than Lanham (1993a):

Someone will have to create digital networks of student information and publication. Someone will have to reconfigure knowledge from book-length packets into new forms. Who will perform all these tasks? Create, manage, an undergraduate “publishing” universe? Whoever does this will play a central, not a peripheral or support, role in our new undergraduate curriculum, whatever it looks like. The central information task in a digital expressive universe—and a fortiori—in a world where print and electronic materials must work together, is no longer strictly an indexical storage and dissemination task but something quite different. (p. 12)

NEW PLAYERS, NEW CULTURES

Lanham’s model has yet to be described, and the participants in the evolution of that model have yet to realize the importance of collaboration. Those community college librarians, waiting in the wings, without whom the solitary instructor cannot “deliver” instruction in an environment that uses the products of digital as well as the Gutenberg technology, remain to be engaged in the teaching/learning processes. The opportunity for quality processes appears at every turn on the road to the transformation of the educational system.
In community college information enclaves, the traditional culture of literacy (based on the printed word) is merging with the culture of digital realities. Information literacy, recently described by McClure (1994), is a cluster of literacies practiced in the integrated library/high technology centers of community colleges. This cluster of information literacies (traditional, network, computer, and media literacies) only complicate the search for quality connections with the libraries' customers/clients/students. Infomedia problem-solving skills are intertwined with traditional print as well as network, computer, and multimedia literacies.

In their own right and by their recently improved professional training, information professionals are assuming new roles as collaborators with instructors and as a necessary part of the teaching process as they assume greater responsibility for learning in these interactive environments. The information professionals, more than anyone else, are in a position to collaborate with instructors as instructional teams move from the old to the new paradigm of information and computer access across the curriculum and across the world.

The dotted line relationship between the community college library and the classroom reflects all the weakness and tentativeness that a dotted line suggests (Smith, 1989). It is the quality movement, however, that can bring these entities together in an effort to redesign the process of teaching and learning so as to focus on the learner rather than on the classroom lecturer. This will not be an easy task. Hammons (1994) of the College of Education at the University of Arkansas, who has been involved in community colleges as a student, administrator, consultant, teacher, and researcher, has written a sobering article delineating the prerequisites and underlying assumptions that must be operative if quality initiatives are to succeed, and the ingredients assuring its success are a mosaic of interconnecting processes linking the classroom activities with knowledge-generating activities characteristic of a new learning community and especially its library.

Achieving quality must be a continuous process. And thoughtful analysis and reconceptualization of information services is a starting point, a preparatory exercise for the creation of new visions, missions, service strategies, and customer service reorientation. One example of an attempt at reorientation is the vigorous discussion of the nature of reference services in academic libraries as reported in the January 1995 issue of the Journal of Academic Librarianship. When the thoughtful information professionals write under such titles as: Is Traditional Reference Obsolete? or Traditional Reference is Dead, Now Let's Move On, there is hope for a revitalized service commitment.

Equally important is the evolving nature of quality processes themselves as they are better understood, refined, and practiced. Albrecht's (1990) writings may help those who are trying to transplant quality
initiatives from business to higher education and its libraries. "What is needed is not a fixed recipe or a 'one size fits all' process, but a logical system of methods and tools that can be brought to bear in a unique way for the special needs of a particular service organization" (p. 48).

And a final word of caution for those who would mistakenly perceive the Baldrige Award criteria as presenting the model for achieving total quality service. The award criteria are assessment tools and not programmatic suggestions for initiating the process. Albrecht's contribution may be to get educational organizations beyond what has been called TQM and its formulary expressions to a set of interrelated methodologies that may be applied in any chronological combination or progression depending on the history and culture of the organization itself (see Albrecht, 1990, pp. 48-53). Quality service's flexibility and adaptability to organizations regardless of size leaves a residual feeling in those organizations that they are truly in control of their processes and can expect to remain in control. How community college libraries will emerge through such a process remains to be determined. It is reasonable to suggest that librarians will learn in collaboration with other functional areas in the community college as they try to focus, under faculty leadership, on the needs and exigencies of the independent lifelong learner.

NOTE
1 For example, there are the Estrella Mountain Community College Center, metropolitan Phoenix; Leavey Library at the University of Southern California; the new library at Indiana University/Purdue University in Indianapolis; George Mason University Center Library, Fairfax, VA; the projected integrated library/high technology center at Mesa Community College, Mesa, AZ, and the projected library at Eastern Michigan University.

REFERENCES


