Universities are increasingly receiving requests, and often mandates, to become more "engaged" in meeting the practical needs of the work force, to become more customer and service oriented, and to utilize new and emerging technologies in the delivery of educational resources. Yet, in many respects, universities continue the "business-as-usual" approach they have utilized since their inception. The university tradition of executing the right of passage for undergraduate students and immersing graduate students in esoteric research dates back to medieval times. Clark Kerr has identified seventy-five institutions that were founded prior to 1520 that "... are (still) doing much the same things, in much the same places, in much the same ways, under the same names."

Private universities with strong endowments will likely have the prerogative to withstand the pressures for change and transformation for many years. However, our public colleges and universities are receiving demands from constituents that will increasingly correlate degrees of satisfaction with levels of financial support at an unprecedented rate in the future.

When Abraham Lincoln signed the Morrill Act in 1862 that created the land-grant college system, public expectation for access to a nonclassical curriculum of college-level instruction was established in every state. This expectation was reinforced by the second Morrill Act of 1890, which extended higher education opportunities to African-American students by funding seventeen black land-grant universities.

The Smith-Lever Act of 1914 placed even more service obligation and public expectation on the "people's universities" by providing funding for the dissemination of knowledge and research through cooperative extension.

At the time of the land-grant legislation, the United States was an agrarian society with two-thirds of the work force still on the farm and was moving into the industrial era. Therefore, agricultural
and mechanical (A & M) colleges were very much in keeping with the times when they were created at the turn of the century.\textsuperscript{2}

Unfortunately, the initial service and outreach needs that were once extremely relevant for delivery by universities are no longer current, as our population has moved from a primarily rural to a predominantly metropolitan concentration, and we have changed from an agricultural- and industrial-based work setting to one that is information- and technology-based.

It is imperative that publicly supported colleges and universities regain the public's confidence by demonstrating a new commitment to relevance. In his recent book, \textit{Reclaiming a Lost Heritage}, John Campbell states, "At no time in American history have individuals, and hence higher education, faced more urgent demands and challenges than in the present . . . . Defending the integrity of the land-grant college and university is crucial for this nation."\textsuperscript{3} Yet, Campbell notes, the late Ernest Boyer, when serving as executive director of the Carnegie Foundation for the Advancement of Teaching, observed:

I am concerned that in recent years, higher education's historic commitment to service seems to have diminished. I am troubled that, to put it simply, many now view the campus as a place where professors get tenured and students get credentialed, but what goes on there is not seen as relevant to many of our social problems. The overall efforts of the academy are not considered to be at the vital center of the nation's work. And what I find most disturbing is the growing feeling in this country that higher education is a private benefit, not a public good. I think we are paying a price for that!\textsuperscript{4}

The National Association of State Universities and Land-Grant Colleges (NASULGC), in conjunction with the W.K. Kellogg Foundation, recently appointed a commission to make recommendations concerning the redirection of universities. In a letter referencing the situations they plan to address, the commission leaders stated, "We are convinced that unless our institutions respond to the challenges and opportunities before them, they risk being consigned to a sort of academic Jurassic Park
— places of great historic interest, fascinating to visit, but increasingly irrelevant in a world that has passed them by."5

Over the past three years, the Pew Foundation conducted higher-education roundtables at a cross section of 120 American college and university campuses. Each roundtable consisted of two one-day meetings of approximately thirty campus leaders, half of whom were faculty. A recent report on the Pew Roundtables provided a shared receptivity for change by stating, “One of the more reassuring aspects of the roundtables was their recognition of the need to overcome those cultural impediments to change that have become an ingrained part of the academy."6

Areas of Concern for Redirection

Today, the outreach and public-service functions of the university are in a unique position to serve as the agents for institutional change and transformation. As the most overt arms of the university, public service and outreach have typically established the majority of the institution’s credibility for relevance with community leaders, business managers, and legislators.

Through outreach initiatives, faculty have the opportunity to build an understanding of community needs. Conversely, through these same initiatives, the off-campus community can gain exposure to expertise represented in universities. Thus, administrators of university outreach and public service programs serve in the unique role of change agents, brokers, and catalysts in matching community needs to faculty expertise. The following are key internal situations and external challenges that university outreach and public-service personnel should consider in effectively fulfilling the role as institutional “change agents”:

I. Rising Costs

The current nomenclature of “public universities” has changed to that of “public-assisted universities.” In many states, as legislative appropriations have failed to keep up with rising costs, it is difficult to differentiate between public and independent institutions. Independent institutions are also caught in the bind of rising costs and declining federal student-aid programs, and this situation is causing many of the heavily endowed universities to reconsider their budgeting policies. Many elite institutions, for example, are “... having to consider what trade-offs are necessary to continue need-blind admissions.”7
Concurrently, with rising costs of maintenance, physical infrastructure, and core resources (maintenance of buildings, libraries, laboratories, and telecommunications technologies), universities are being asked to respond to an increasing number of students with physical, sensory, or cognitive disabilities, and to assume responsibility for the widening disparity of primary and secondary schools to prepare entering students adequately.

The challenge to all colleges and universities is to remain accessible. Public universities have an additional tacit challenge while managing budgets: they must deal with the fact that taxpayers increasingly convey a finite resource base to legislators and many worthy programs compete for the same resources.

Administrators of colleges and universities must learn to manage available resources in a more efficient manner. Public institutions increasingly must demonstrate cost benefits and cost effectiveness through shrewd management.

Continuing education has demonstrated there is a public demand for relevant programs that are well marketed. These same management principles need to be applied throughout the organizational structures of colleges and universities.

II. Changing Clientele

Over the years, even the most tradition-bound historical institutions experienced major changes in the populations they served. Many moved to coeducational situations, almost all have embraced adult and part-time audiences, and now most are experiencing major shifts in ethnic and racial composition. Often avoided, however, is the need to equitably redirect resources to complement the changing composition of students being served and to meet the changing needs of society.

Land-grant institutions have, for the most part, failed to recognize that the United States is no longer a predominantly agrarian and manufacturing-based society. In their typically rural settings away from the hurly-burly of America's population centers, many land-grant administrators and faculty share major misconceptions of urban higher-education needs. Among these misconceptions is the notion that urban institutions serve only economically and academically deprived students who cannot afford to go away to school. Another misconception is that all urban students are part-time commuters who take classes during the evenings and on weekends.

Although it is true many urban students are nontraditional, first-generation college students and have financial needs that are different than those of their counterparts at historical land-grant institutions, most are quite typical in respects other than their place-bound situations. And I concur with Ernest Boyer, who wrote:

I'm almost embarrassed to mention it as a problem because it is so enormously complex, but we live in
cities. They determine the future of this country. Our children live there, too. And I find it ironic that universities which focused with such energy on rural America a century ago have never focused with equal urgency on our cities. 9

Most urban-based institutions have experience in serving a much broader composition of learners than their rural-situated counterparts and have the primary responsibility to provide expanded service to constituents in their immediate communities. What is not needed is for universities situated in rural America to rise to the “wake-up call” and to begin transporting, by technology or in person, broad-scale educational resources to the cities. On the other hand, increased collaborative efforts between rural and urban-based institutions could provide immense opportunities in more effectively and efficiently meeting the educational needs of a changing society.

III. New Technologies

As we move into an information-based society, new and emerging technologies are having a major impact on educational needs and the manner in which educational resources are delivered. We are now dealing with a generation of 18- to 21-year-old students who grew up in the video-game, microcomputer era. These students possess learning styles that are considerably different from those of past generations. The majority of our adult returning students have employment needs that demand telecommunications literacy.

Unfortunately, the primary method of instruction Clark Kerr identified in institutions that were founded prior to 1520 — the lecture or lectio, as it was historically known — still prevails today. Through the employment of multimedia techniques, presentation skills leading to better understanding and retention of subject matter can be greatly enhanced, yet many faculty continue to conduct business as usual in the traditional classroom, ignoring the world about them.

The utilization of a variety of multimedia technologies has proven to be extremely critical in the effective delivery of distance learning. The Principles of Good Practice guidelines employed by the Western Cooperative for Educational Telecommunications (WICHE), for example, could greatly enhance most on-campus
instructional environments. The following three elements of the Good Practice guidelines serve to illustrate this point:

**Faculty support**

- The program provides faculty support services specifically related to teaching via an electronic system.
- The program provides training for faculty who teach via the use of technology.

**Resources for Learning**

- The program ensures that appropriate learning resources are available to students.

**Students and Student Services**

- The program provides students with clear, complete, and timely information on the curriculum; course and degree requirements; nature of faculty/student interaction; assumptions about technological competence and skills; technical equipment requirements; availability of academic support services and financial-aid resources; and costs and payment policies.
- Enrolled students have reasonable and adequate access to the range of student services appropriate to support their learning.
- Accepted students have the background, knowledge, and technical skills needed to undertake the program.
- Advertising, recruiting, and admissions materials clearly and accurately represent the program and the services available.10

An increasing number of institutions and consortia, such as WICHE, the University of Phoenix, the National Technological University, Mind Extension University, and the Educational Network of Maine, are stretching the continuum of the way education is imparted. If alternative learning opportunities from consortia such as these, with origins from traditional college and university settings, do not meet individual student needs, an increasing number of employer-based learning opportunities will be provided by companies such as General Motors, Xerox, Disney, Motorola, and McDonald’s. These programs will be aggressively marketed to potential students who are not employees of the purveying company.

Other for-profit providers will exploit student markets on a global basis by using multimedia telecommunications technologies. Some of these programs will be accredited in the traditional sense, but most will not. Knowledge attainment will increasingly serve as
the test for employability, and the manner through which knowledge and skills are attained will become transparent.

In describing the Educational Network of Maine, its director, George Connick, states, "The network is going to be a lightning rod, because it raises questions. What's going to happen to campuses? What's going to happen to faculty? What's going to happen to teaching?"11

IV. Research Application

When analyzing institutional budgets, critics are discovering that research represents a major cost. This is especially true when the non-instructional faculty work hours are added to laboratory facility and supply costs. Research in many disciplines can have a practical application in assisting with fulfillment of societal needs, such as stimulating economic development, lowering crime rates, sustaining civic culture, and developing public policies.

Unfortunately, much of the research in which faculty are engaged hinges on personal interests and personal benefits with little or no consideration given to the needs of the state, the community, or the institution.

State-supported research universities are missing a major opportunity by not working closely with governmental agencies in analyzing avenues through which university research can serve to complement the public's needs. Numerous opportunities also exist to form institutional research partnerships with the private sector. In many university settings, private-sector research linkages with faculty do not involve the institution, but rather are consulting or "moonlighting" arrangements which exploit university computing and laboratory infrastructures.

It would be inappropriate for the government or other external agencies to exclusively set the university's research agenda.

However, if faculty were more familiar with the state's needs, for example, and the state had a better understanding of university expertise and research capabilities, a synergy would likely evolve that could result in helping to restore public trust and confidence in the relevance and broader benefit of higher education institutions.

To facilitate external research partnerships most effectively, universities need to systematically establish internal infrastructure that will serve to stimulate, facilitate, and reward all aspects of research endeavor that has an applied application.
Mary Walshok, in her recent book *Knowledge Without Boundaries*, describes what research universities can do for the economy, the work place, and the community, and focuses on a unique brokering approach that has been taken at her university by forming project CONNECT.

The CONNECT program works intimately with the UCSD (University of California-San Diego) Office of Technology Transfer, organizes faculty research briefings for industry on a regular basis, employs campus graduate assistants, and includes faculty as guests at all functions. Staff review, upon request, campus research initiatives that have potential industrial implications and facilitate industrial partnerships where appropriate. They also schedule as many events and briefings on the campus as possible to increase the business and government communities' identification on the campus.\textsuperscript{12}

A systematic approach to research collaboration such as project CONNECT is ideal. However, a less ambitious partnership between the university offices of research and continuing education would assure that local dissemination seminars are one of the end products of all applicable research grants, and would, in most institutional settings, represent a major step forward in cultivating needed research reform.

V. Confronting the Paradigms

The major challenge facing higher education institutions today is the restoration of public trust and confidence. The growing perception is that colleges and universities are totally resistant to change and are unresponsive to societal needs. The public reads about out-of-control tuition escalation, a lack of sensitivity to the current educational needs of society, an unwillingness to readjust to changing learning styles, and an unwillingness to apply research expertise to meeting relevant societal needs.

An increasing public perception is that universities are inefficient, outmoded, inflexible bureaucracies controlled by tenured faculty who are out of touch with the world around them. Across the nation, legislators, members of governing boards, and the public at large are expressing displeasure. As noted by Ray C. Albright:

Higher education is too resistant to change. Too often, public colleges want to keep doing things the way they have always been done. They need a 'wake-up call.' Everything is changing around us, and they have to change, too. It is for their own good.\textsuperscript{13}
Rather than sit back and experience a declining resource base resulting from increased costs, declining governmental appropriations, and the failure to attract students with relevant programs that are attuned to changing learning styles, colleges and universities must become more proactive in fostering institutional change.

The strategy that Portland State University President Judith Ramaley recently outlined at Michigan State University serves as an excellent model for emulation.

Large-scale change can result from a financial or governance crisis or from a leadership change, or can be generated intentionally through an internal process. If planned systemic change of a developmental nature is the goal, it is more likely to occur with the strong support of top leadership and within the context of a strong and clear mission statement, an environment that promotes a candid assessment of the current conditions at the institution, and a pattern of faculty roles and responsibilities that support the institutional mission.\textsuperscript{14}

When structuring higher educational reform, all issues must be considered, and the process should be highly participatory, involving both internal and external stakeholders. Even issues associated with tenure and post-tenure faculty review need to be on the table; otherwise, the entire process will be viewed as lacking credibility. As Jean Keffler said:

\begin{quote}
Ultimately, the unwillingness of higher education to talk about tenure, and its implications for institutional renewal, with a public that is highly and increasingly skeptical, will weaken higher education.\textsuperscript{15}
\end{quote}

The public service and outreach arms of colleges and universities are critical change agents for educational reform. These units are more informed than any other campus entity on societal needs; they possess the institution's most credible effort in being responsive to external constituencies. Through continuing education, these units have demonstrated cost-effective budget management and sound marketing practices; and public service and outreach units are in a unique position to provide the institutional bridge for faculty to become engaged in applying their vast expertise in meeting the ever-changing needs and challenges of society.
Notes

1 Clark Kerr, "The Internal and External Threats to the University of the Twenty-first Century," Minerv 30 (Summer 1982): 150.
4 Ibid.
8 Peggy Gordon Elliott, The Urban Campus (Phoenix, Ariz.: The Oryx Press, 1994), 1-64.
10 Western Cooperative for Educational Telecommunications (WCET), Principles of Good Practice for Electronically Offered Academic Degree and Certificate Programs (Boulder, Colo.: Western Cooperative for Educational Telecommunications, 1996).

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