Introduction

This research examines the challenges, objectives, goals, strategies, and tactics facing leaders, administrators, faculty, students, and other stakeholders with an interest in international higher education. These broad topics necessarily encompass many factors including the market forces of globalization, increasing competition, diminishing budgets, burgeoning demand, transformative technologies, rooted traditions, curriculum renovation, pedagogical innovation, academic freedoms, universal access to learning, evolving governance, faculty reformation, as well as quality protections and overall equity.

Rather than treat these factors as distinct and isolable, the text here interweaves them as they interrelate in often overlapping categories of challenges, policy, strategy, tactics, and so on. In this effort, the discourse attempts to construct a spiral rather than a mere repetition of issues, drilling through layers of breadth, depth, and ultimately to application. This may provide a fuller sense of the multidimensional academic frontlines in lieu of a simpler linear and more categorical progression. That, alas, was the aim if not the ultimate end. The architectural problem is further compounded in that while the most pressing issues in academia are accelerating at an urgent pace, the institutional response is often tediously sluggish. That frequently makes it difficult to contrast the profound nature of the need with the incongruently mild reaction. However, while the reforms in academia may move at a glacial crawl, it is possible to seek at least a sense of where and in what ways the glacier might be advancing or receding.
The Challenge

Leaders of academia are facing new challenges and opportunities unparalleled throughout the history of education. The following sections will consider the role of higher education in a rapidly changing world, the increasing demand for educational opportunities, and ways of meeting that demand.

The World Setting

The United States has found itself as global role model in the design and delivery of higher education (Altbach, 2001). Academic leaders from around the world tour American campuses to glean policies and mechanisms that have contributed to a highly successful educational system. The visitors return to their home countries hoping to reengineer their own programs along the lines of U.S. practices such as the course credit system; how public and private institutions coexist while challenging one another in a competitive environment; what issues are confronted in achieving diversity, accountability, and coordination of serving public needs. Indeed, “American universities and colleges are widely viewed as having dealt constructively with many of the challenges facing higher education throughout the world” (Altbach, 2001, p. 11).

The United States’ academic prestige is not necessarily due to the nation’s economic or cultural super-status, “but because American higher education as a system is simply better adapted, normatively and structurally, to the requirements of a postindustrial age” (Trow, 2001, p. 122). Such prominence comes with an enhanced responsibility, desired or not, of developing systems that prove worthy as other peoples worldwide pattern themselves
on our example. Thus, leaders and visionaries in American higher education must responsibly embrace a global perspective.

A global perspective on education also serves the self-interested national needs of American students. Engberg and Green (2002) note “that American college graduates will live and work in a world in which national borders are permeable; information and ideas flow at lightning speed; and communities and workplaces reflect a growing diversity of culture, languages, attitudes, and value” (p. 7). In this setting, an American education must produce graduates who will be productive contributors to society both locally and globally while understanding that “the fates of nations, individuals, and the planet are inextricably linked.”

Such a global approach to education “provides a realistic, balanced perspective on world issues, as well as an awareness of how enlightened self-interest includes concerns about people elsewhere in the world” (Cushner, McClelland, & Safford, p. 254). It is institutions of higher learning that must take the lead “educating the world citizens to allow us to live upon our planet while protecting it” (Duderstadt, 2000, p. 21). Such a practical approach to developing curricula – addressing the loftier aims along with the baser realities – should seek to provide a practical undergraduate education for the 21st century, grounded in a “liberal education that produces an individual who is intentional about learning and life, empowered, informed, and responsible,” then ensuring that such an education is “available to all students, not simply the self-selected (and comparatively privileged) group of the past” (AACU, 2002, p. 25).

Corresponding with a move toward a more global perspective in higher education, a continued motion toward universal participation in postsecondary education will
“surely have revolutionary consequences for existing institutions and systems of higher education as well as for the larger societies that sustain and depend on them” (Trow, 2001, p. 115). Governments and individuals around the world are increasingly turning to higher education to play a decisive role in “broadening the horizons of students and allowing them to develop a deeper understanding of the multiplicity of languages, cultures and business methods,” as numerous programs are established and fortified to promote such global advances (OECD, 2003, p. 273). One of the largest challenges in achieving such sweeping access to and benefits of higher education is reducing the direct costs of schooling, particularly to engage poorer households and nations, and most especially for young girls and women (UNESCO, 2003).

Higher education analysts such as Georgetown University’s Martin Irvine (2003) have said this global demand matched with the enormous disparities in supply provide an “unprecedented market opportunity for educational services,” along with a “huge social and economic challenge for developed nations hoping to spread the benefits of globalization to the poor countries and expand the global marketplace”:

Most people continue to see education as the only hope to forestall impending worldwide catastrophes and cultural misunderstanding and economic disparity. The need to exchange knowledge and learning across borders, cultures, and languages is felt more urgently than ever. (Irvine, 2003, p. 104)

The gap between the need and supply of higher education has advanced the emergence of a global business network. Among the participants in this network guided by market forces are found traditional and digital publishers, media companies, software and hardware producers, consultants, communication services, as well as for-profit and
nonprofit education providers (Irvine, 2003, p. 71). Such business drivers and motives may help to address in particular the social and economic divides caused by “devastating consequences of ignorance and exclusion from the world marketplace” (p. 104).

Educational offerings guided by market forces are expanding worldwide. Countries including Egypt, Singapore, China, Poland, German, Malaysia, and others are establishing private and frequently for-profit universities in competition with traditional institutions (Newman, Couturier, & Scurry, 2004). In Asian countries including Japan, South Korea, the Philippines, India, and Indonesia, as many as 80 percent of university students are now enrolled in private universities (pp. 36-37).

Distance learning programs are also stepping into the international void, providing perhaps otherwise precluded students around the world the opportunity to obtain university degrees. It is indeed an era “when many students have never known life without the Internet, when time is constrained for adult learners seeking additional education, and when worldwide demand for education is at an all-time high, the classroom no longer bounds the learning environment” (Oblinger, Barone, & Hawkins, 2001, p. 2).

The Demand

It is frequently said that a college education today is as important to career success as gaining a high school diploma was in the 1950s, and “it is now the pathway to social mobility, personal prosperity, and civic engagement” (Newman, Couturier, & Scurry, 2004, p. 154). The realization of this is reflected in the more than three-fold increase in U.S. college enrollments, which between 1960 and 2001 expanded from 4.1 million to 14.8 million (AACU, 2002, p. 3). In a ten-year period between 1998 to 2008, 14.1 million jobs
required a bachelor’s degree or some level of postsecondary education, which more than
double of those new jobs requiring a high school diploma or less (p. 4). It has also been
found that college graduates can expect to earn 80% more (about $1 million) than high
school graduates over a lifetime of work (p. 5). With this sort of economic incentive to
achieve a college education, the demand for graduate degrees beyond the bachelor’s is
climbing as well. Nearly 2 million American students are in graduate programs, with an
annual production of 43,000 doctoral degrees and 400,000 master’s degrees (LaPidus, 2001,
p. 259). Postsecondary education throughout the United States totals up to be a $250-billion
industry (Irvine, 2003).

The numbers demonstrate an even more precipitous worldwide climb in higher
education enrollments. From 1950 to 1997, global postsecondary education enrollments
increased from 6.5 million in 1950 to 88.2 million in 1997, and are forecasted to reach 160
million by 2025 (Irvine, 2003). “In short, the global education marketplace represents an
extraordinary opportunity” (p. 69). However, even though global demand for higher
education is growing at double-digit proportions, the resources for paying the tuition bill are
low or nonexistent in large parts of the world, with insufficient government funds to meet
the full educational needs even in richer nations (p. 69). Given this stark imbalance, higher
education must seek new avenues of delivery tapping new technologies able to transcend
national boundaries and limited budgets, such as those provided through electronic learning
(e-learning) programs:
With only 17 percent of the world’s adults participating in some form of tertiary (postsecondary) education, e-learning is rapidly being embraced as the only way to scale ongoing education to the world of need. … The challenge to the e-learning industry is capturing the opportunity with enough combined resources to meet the needs of the marketplace in all its cultural diversity. (Irvine, 2003, p. 78)

A Gist of Solutions

The structures and systems of higher education enterprise are likely to be dramatically transformed over the years ahead, whatever the forces may be that drive the change (Duderstadt, 2000). The transformation may spring from within innovative organizations responding to societal needs, but academia is “more likely to be transformed by new markets, new technologies, and new competition. … The institutions most at risk will not be of any particular type or size but rather those most constrained by tradition, culture, or governance” (p. 297).

Though much of the world looks toward the United States as a model for academic reforms, there may be an unfortunate and misguided American tendency to ignore the rest of the world (Altbach, 2001). Educators around the world must go beyond their moribund institutional models and historically narrow national interests to achieve a higher order of purpose serving the best interests of all peoples. This poses challenges on numerous fronts, as “education has traditionally been a jealously guarded local and national matter and a solidifier of cultural differences, approached more in social and cultural terms then in the terms of business models and markets” (Irvine, 2003, p. 69).

Much of the global economic world functions by international exchanges of goods, services, currencies, communications, and so forth. Thusly may the academic
world expand on a working assumption that education is also “part of a global, networked knowledge economy” where economic and social effects are driving new methods of interaction (Irvine, 2003, p. 70). Such economic concepts applied to higher education may be offensive to “many who entered academic life to escape the ethos of buying and selling that governs so much of modern life,” however upcoming educators in the new academic environment will need to devise and adopt transformational models of relations between and within ranks of students and teachers, although it may still be unclear what those models might be (Trow, 2001, p. 130).

What is clear is that opportunities for American higher educational institutions extend well beyond the borders of the United States (Bok, 2003). “Vast numbers of potential students are now within reach of American higher education in countries that lack universities with a reputation or the resources of their leading counterparts in this country” (p. 90). Though the United States has seen a recent drop in the net numbers of international students attending American universities and colleges, a total of more than 720,000 international students for the academic year 2003/2004 still places the United States as a top choice for students studying outside of their home country, contributing some $13 billion annually to the U.S. economy (IIE, 2004). However, large numbers of potential international students are precluded from studies in the United States due to travel, financial, and national barriers. This provides an opportunity for e-learning organizations through international outreach and agreements opening markets (Irvine, 2000). The degree of success that institutional leaders find in making “critical connections between technological possibilities and institutional priorities and using their
vision and influence to chart a successful course … will profoundly influence the future of higher education in our country” (Hitt & Hartman, 2002, p. 21).

Researchers and analysts observe that there has never been a more important time for serving the purposes of higher education (Newman, Couturier, & Scurry, 2004). American society, as well as other societies around the world, needs to address problems such as economic revitalization, growing income disparities, enhanced social mobility, health care provision, and ensuring the needs of an engaged and safe civilization. Many nations look to the United States for solutions to much of the world’s woes. “For the United States to be a successful democracy and a model to the world, higher education must stand as a central source of hope, vision, and assistance” (p. 214).

Objectives in Higher Education

Having considered the general challenges facing higher educators, it is a logical progression to examine objectives, strategies, and tactics for meeting those challenges. A key objective, simply put, may be stated as achieving the greatest accessibility and productivity of higher education as possible, so as to better obtain the fullest development of individuals and society. That objective may be achieved by better understanding and setting goals within fundamental issues visited below, such as demographic conditions, foundational infrastructure, leadership and governance, and the impact of emerging technologies.
Demographic Conditions

The nature of challenges in greater worldwide access to higher education may be effectively illustrated by examining the particular dynamics and disparities of academic achievement in the United States. American college attendance has grown so that now 70 percent of high school graduates receive some sort of college education within two years of graduating, and nearly 90 percent say they hope to attend college at some point (AACU, 2002). Along with the rise of American high school graduates going right into college, the average age on campuses is growing older, as adults return to complete their degrees started earlier, or start afresh. Students aged 25 years or older account for 45 percent of college classroom attendance, and now so many more women than men are enrolling, that educators are seeking ways to increase the number of men enrollees (Kuh, 2001). While “the complexion of college classrooms is much more colorful today” (p. 281), studies have found that the actual college completion rates for low-income and students of color are “abysmal” (Newman, Couturier, & Scurry, 2004, p. 159). Nearly half (48 percent) of students from high-income families have graduated from college by age 24; compared to only 7 percent of low-income students, where 29 percent of African-American and 31 percent of Hispanic students drop out before completing their first year (p. 57).

One reason for this high drop out rate among racial minorities is the finding that many high schools – especially in poorer school districts – have been unable to produce graduates prepared for college-level performance, for reasons including “poor quality teaching, low teacher and student expectations, large class size, weak curricula, and
unconscionably poor resources” (AACU, 2002, p. 12). Lower income students may also suffer from a shortage of role models such as parents or siblings who have gone to college. This puts them at a distinct advantage to those students who may have a pattern to follow.

Affluent students, or students who have parents or role models who have gone to college, are born into a network that teaches them the process of success, instructing them at each step on how to apply for financial aid; how to seek out faculty mentors; how to obtain necessary help from deans, advisers, and counselors; and fostering a belief that they will succeed. (Newman, Couturier, & Scurry, 2004, p. 175)

Many lower-income students may be the first of the family to attend college. Whereas 78 percent students whose parents have graduated college also have the same goal, only 36 percent of first-generation students aspire to a college degree (Newman, Couturier, & Scurry, 2004). “As a result, far too few take the necessary steps that lead to enrolling in a college or university” (p. 164).

Similar demographic and economic issues affecting educational opportunities are found beyond America’s borders. The divisions between rich and poor countries, as well as between the rich and poor within a country, create vast disparities separating those who are able to find a place in the new economy, and those who cannot. While there has been global growth in education and training over the last two decades, “the world still suffers from intolerable inequalities at the international level and sometimes within nations”: 
Many countries are struggling with limited access to education and training for children and young people, and at the same time have to address the basic needs of an older generation. Low quality and insufficient relevance are other concerns. At the root is often the problem of financing adequate provision, and adequate structures for education and training. (Moore & Tait, 2002, p. 7)

**Foundational Infrastructure**

Arthur Levine (2001), president of Teachers College at Columbia University, has warned that the present design and structure of American higher education is unsustainable. Various aspects of the “radically different environment” educators must address include forces such as the nation’s transition to an information society, shifting demographics, downward pressures on the cost of higher education, emerging technologies, and a “legion of new competitors” (p. 57). Levine proposed that the traditional academic guardians (administrators and faculty) must either reform their purpose and methods in the new environment, or, if they do not, face a revolution in who will ultimately control education.

There is an array of issues and players rearranging the fundamental forms and functions in higher education. Some of the dynamics within the new environment include:

- Public, private, and for-profit institutions alike are competing to attract students, in ways and with an intensity never seen before.
- Traditional universities are more focused on developing new revenues than ever before.
- There has been huge growth in the number of for-profit universities and colleges, the degrees they give, and the acceptance of their degrees by students and employers.
- Thousands of virtual programs are growing rapidly, altering the way many students attend college and how classes are delivered.
• Corporate universities and certificate programs are widespread, in some fields becoming the preparation preferred by employers.
• New organizational forms are emerging that rely heavily on technology and challenge the hegemony of the traditional faculty and the academic discipline-oriented college or university.
• For the first time, higher education has gone global. Even the degree structure of ancient European universities is changing to make them more competitive. (Newman, Couturier, & Scurry, 2004, p. 29)

Pittinsky (2003) observed that some of the most critical ways in which the American higher educational landscape is shifting includes the growing competition between for-profit companies and nonprofit institutions for students, the enrollment boom across the country beyond the capacity to accommodate it, and the increasing number of older and more professionally oriented learners with different expectations than the traditional student. On the administrative side, there are intensified cost pressures, new funding sources such as corporate giving along with the strings attached, the changing composition of faculty with more reliance on adjuncts and professional instructors; all combined with the “explosive adoption” of Internet technologies, it makes for a “convergence of industry and technology change that is most potent” (p. 14).

Within the United States, there is a growing movement to see the higher education system as an array of institutions competing in an academic marketplace (Newman, Couturier, & Scurry, 2004). With an entry of large numbers of for-profit institutions added to a mix of more than four thousand degree-granting universities and colleges, some say an educational marketplace has already been formed, where indeed “perhaps only a market can serve the public effectively” – a shift also evident in numerous other countries around the world (p. 34).
Gumport (2001) found that those who see higher education as an industry serving a market sector of the economy might consider the metaphor of the corporate model, where colleges and universities are to produce and sell goods and services such as training the workforce, advancing economic development, and conducting research. Through this corporate model, “harsh economic challenges and competitive market pressures warrant better management, which includes swift programmatic adjustment, maximum flexibility, and improved efficiency in the direction of greater accountability and, thus, customer satisfaction” (p. 87). On the other hand, there are those who still see higher education as a higher calling that must cultivate social qualities such as civic participation, the preservation of cultural heritage, and the development of “individual character and critical habits of mind, as well as economic development functions. The tension between the two legitimating ideas is profound” (p. 87).

Given the growing demand for access to higher education, governments around the world may find few options but to “encourage the growth of private institutions to increase enrollments while minimizing the public investment” (Newman, Couturier, & Scurry, 2004, p. 119). Still, even private for-profit educational institutions have an obligation to a greater social purpose beyond corporate profit, since they typically receive state and federal tax dollars through a student’s financial aid. For even the few accredited private colleges and universities that have rejected public funding (typically religious organizations) – if they are nonprofit organizations, “their tax-exempt status makes them reliant to a degree on the public's goodwill” (p. 107).
An important distinction as market forces and terms intrude in traditional academic settings, is the difference among the concepts of *costs* incurred by the university in providing educational programs, the *prices* charged to students in the form of tuition, and the *value* students might find in the educational experience (Duderstadt, 2000). Certainly, students are finding a market value in a higher education so critical to success in the globalized marketplace. However, at the current pace in pricing of education – since 1980, the average price of four years of college has risen more than 110 percent over inflation’s costs – by 2015, half of all American students will be unable to afford higher education (Newman, Couturier, & Scurry, 2004, p. 60).

Seeking ways to pay for college education will become more critical to both students and society as the necessity is made dearer. To paraphrase Nietzsche, those who have a commanding *why* will passionately seek a functional *how*. Traditional financial support for higher education includes personal funds, grants, and loans. Low-income students are likely precluded from sole reliance on personal funds. Student loans can be problematic, perhaps due to a cultural aversion to debt among minority students (Johnstone, 2001), or through life plans “such as marriage or the choice of a socially worthwhile but low-paying career” waylaid by high indebtedness (p. 156). Students who may work excessive full- or part-time jobs to pay their way through school frequently find the work interferes with class schedules, course selection, and learning, and are less likely to graduate or even finish their first year of studies (AACU, 2002, p. 18).

For most of the last decade of the 20th century, the average total of spending on education has remained about 5 percent of the gross national product (GNP) for developed
countries, and slightly less (4 percent) for less developed countries (Irvine, 2003).

Approximately 63 percent of worldwide education costs are paid for with government funds (p. 72). This investment in education has benefited from a multiplier effect, where in the U.S., education can return $5 to the economy for every dollar spent, and for every increase of one year in average length of education in a country could lead to a 3 percent raise in gross domestic product (GDP) (p. 73).

**Governance**

Those involved in the governance and guidance of higher education (traditionally institution administrators and faculty), have a number of factors to contend with in the transformation of academia. That number includes five key underlying forces, the most prominent being the shift of policy makers toward a market-oriented structure in higher education:

- The growing competition among traditional nonprofit universities and colleges;
- the impact of the new providers of higher education, including for-profit degree-granting institutions, virtual programs and institutions, and corporate universities;
- the impact of digital technology;
- the globalization of higher education;
- and the growing dependence of political leaders on market forces to structure higher education. (Newman, Couturier, & Scurry, 2004, p. 31)

As these economic, social, and technological impacts gather in market forces, it demands a need for decisions and actions to be made at market speeds, rather than the traditionally and even anecdotally slow pace of academic governance. With a number in the area of 70 percent of American high school graduates going on to attend some form of higher education, the public has a solid stake in the effectiveness and value delivered by colleges and universities (Eaton, 2002). Education administrators have been held to greater
levels of accountability for institutional performance, and in turn are in need of “greater
autonomy in the operation of the institution to fulfill the agreed-upon mission” (Newman,
Couturier, & Scurry, 2004, p. 38). Some areas of greater accountability that have been
sought by various state legislatures include curbing the rise in costs, cutting bureaucratic
bloat, increasing faculty involvement in teaching, addressing the perceived uselessness of
some scholarship, reducing administrative sabbaticals, shortening the amount of time
students take to graduate, removing program overlap, and reconsidering faculty tenure

The topic of tenure is a hot-button item for faculty (especially among the tenured or
tenure-track), as well as with those who hold the belief that tenure protection is an important
guarantor of academic freedom. Tenure has also been a frequent target of criticism for the
institutional weaknesses it may create:

Unchecked by discipline to peer review, academic freedom can become
academic license. Much too often academic freedom is confused with
unconditional or absolute professorial autonomy, the ability of a faculty
member to do whatever he or she wishes – deciding whether to turning grades
in a timely fashion, whether to hold office hours, or even whether to convene
classes. Tenure can also become a vehicle for sheltering unproductive or
poorly performing professors from being dismissed. (Levine, 2003, p. 28)

Still, Levine (2003) describes tenure as a “fragile system that must not be
undermined by comparisons with business, which is not in the market of discovering new
knowledge for knowledge’s sake, or of offering its employees lifetime engagements”
(p. 29). Market protections serving more developed sectors, such as business equity and
golden parachutes, are not part of the common university structure.
Yet one of the largest problems facing effective management in the new academic environment is finding new ways of engaging faculty in governance, while keeping the greater interests of the organization moving ahead in a highly charged and competitive marketplace. “In too many institutions, faculty members feel the strongest attachments to their disciplines, the weakest to the institution as a whole” (AACU, 2002, p. 16). Some might compare the college or university as the institutional equivalent of a honeycomb, where the academic culture promotes separateness between administrators, faculty, staff, and students (Seymour, 1995). “Nowhere, however, is the organization more fragmented than between and among the academic units” (p. 5). In spite of such divisions and separation from the overall mission of the institution, “professors continue to talk about the community of scholars, and they demand a full partnership in the governance of the institutions to which they are attached, even as their allegiance to their home college or university and to fellow scholars on campus becomes more tenuous” (Keller, 2001, p. 312).

Finding ways to expand the cross-departmental and institutional perspectives of faculty involved in governance, so they can better participate in an effective management process within the competitive higher educational marketplace, may be a tall but necessary order. “Involving people in all aspects of work life that affect them is where an improvement starts. Such a change is not easy; indeed, it may very well be impossible for some. Letting go is often the most difficult step” (Seymour, 1995, p. 161). The stakes are high, in both protecting the noblest purposes of the educational tradition, as well as ensuring institutional validity in an increasingly competitive and unforgiving market.
For higher education to become simply another self-focused, revenue-oriented sector of the society would be a tragedy of massive proportions. The task, then, is to rebuild the compact, renew the understanding between higher education and the public, and renew and strengthen the commitment to the public purposes of higher education. (Newman, Couterier, & Scurry, 2004, pp. 214-215)

Emerging Technologies

Rapidly developing information and communication technologies (ICTs) in a movement towards more “knowledge-intensive, interdependent and internationalized societies” are creating many new “challenges and opportunities for the design and delivery of education” (Moore & Tait, 2002, p. 8). Education analysts forecast that the worldwide market for education could reach as high as $2 trillion in revenues with the growth of for-profit education, along with universities opening transnational satellite campuses, and education content providers tapping communication technologies for international e-learning opportunities (Irvine, 2003, p. 70). The technological innovations are coming so fast that scholars are unable to keep up with the developments in books and reports, but “only journalism can seem to keep abreast of the rapidly changing IT world” (Trow, 2001, p. 130).

Governments, industry, and educators are finding that conventional structures and institutions are not able to meet the changing demands for higher and continuing education for a whole lifespan, and are eagerly turning to new technologies to meet the evolving needs of learners (Moore & Tait, 2002). These technologies in particular allow for open and distance learning, where “all or most of the teaching is conducted by someone removed in time and space from the learner” allowing for “greater dimensions of openness
and flexibility, whether in terms of access, curriculum are other elements of structure” (p. 8).

Another useful term, distributed learning, “refers to technology-mediated instruction that serves students both on and off campus, providing students with greater flexibility and eliminating time as a barrier to learning” (Hitt & Hartman, 2002, p. 1). It is likely that a hybrid model of higher education will become more common in future learning, where “site-based and electronically delivered instruction and support services will be offered together, whether from traditional institutions or new providers” (Eaton, 2002, p. 4).

Along with the potential benefits of technology-enhanced learning models, there are some considerable challenges, limitations, and threats to consider as decisionmakers plan their agendas. Duderstadt (2000) acknowledges the possibilities posed by distance learning technologies such as the collaborative “promise to enhance the intellectual environment of all, while opening up our community to the vast potential of world-spanning dialogue,” though worries that a residential component where students interact with each other face-to-face is critical, especially for undergraduate studies (p. 281). Furthermore is the paradoxical problem where students who might benefit the most from distance learning – “disadvantaged groups, rural communities, illiterate populations or even entire countries” – may not have access to the technologies and tools that would “enable them to become full-fledged members of the knowledge society,” furthering a digital divide that might actually lead to greater disparities in educational opportunity (Moore & Tait, 2002, p. 8).
Also critical to the success of new learning models is how they will fit into traditional institution accreditation standards. Historically central to higher education, there has been a “delicate balance of accreditation to assure quality and higher education, the self-regulation of higher education institutions, and the availability of federal money to colleges and universities” (Eaton, 2002, p. 1). New models of education may threaten this balance if the application and evaluation of standards are thrown off balance.

Distance learning challenges accreditation by altering the traditional faculty role in higher education, thus diminishing face-to-face contact with students. It may also alter the fundamental intellectual tasks of faculty members. Some distance-learning models, for example, separate curriculum design from curriculum delivery, substituting standardized course content for curricula designed by individual faculty members. Similarly, distance-learning can shift responsibility for determining academic standards from faculty members to the staff of corporate or other distance-learning providers or standards may already be embedded in commercially prepared curricula. (Eaton, 2002, p. 5)

Government regulators, as well as the institutions that are regulated, find themselves facing three primary questions as the shift from traditional to newer models of education advances (Eaton, 2002): Can federal funds be delivered to distance learning providers in a way that avoids fraud and abuse? Can traditional standards of accreditation be applied to quality assurance in distance learning, or will new methods of review need to be developed? Will more government controls be needed for the regulation of higher education as distance learning expands? These issues are critical to the continued growth and credibility of new models of education, not only in the United States but globally as well.

The growing numbers of worldwide learners seeking opportunities to advance through higher education, and attracted to the appeal of a U.S. degree in the international marketplace, has American institutions eager to capture a portion of the “ever-increasing global audience”
While those institutions and companies involved in e-learning within the United States can rely on “general industry homogeneity, known regulations and standards, reliable demographics and economic data, and reliable infrastructures,” they are likely to find that is not the case across other borders, where “entry into the global marketplace requires local knowledge, local partners, and focused market research” (Irvine, 2003, p. 76). They may also find that though an American degree is highly prized and sought in other countries, they may find difficulty in attracting large numbers of international students to U.S. distance education programs (Oblinger, Barone, & Hawkins, 2001).

First, many cannot access Internet-based education. Second, some may not be able to take advantage of instruction provided in English. Third, international learners may be expecting different content from Americans taking the same course. Finally, there are competitors for these learners. (Oblinger, Barone, & Hawkins, 2001, p. 12)

Nonetheless, emerging technologies and the expansion of communication networks will continue to have a “radical effect on the transformation of education and training in all sectors” as both developed and developing countries seek to “take part in the emerging global educational community” (Moore & Tait, 2002, p. 11). Several countries, such as India and South Africa, are already heavy importers of distance learning programs through top exporting countries including the United States, Australia, and the United Kingdom; while China, Thailand, and Japan are developing their own distance learning technologies and programs (Eaton, 2002). Distance education and training will also likely play an important role in expanding access to educational opportunities throughout Central and Eastern Europe, provided there is sufficient funding.
and regional collaboration to develop the necessary communication infrastructure (Moore & Tait, 2002, p. 54).

The success found by institutional leaders in meeting the promise and peril offered by the new technologies “will profoundly influence the future of higher education in our country” (Hitt & Hartman, 2002, p. 21), and indeed around the world. “The true challenge for current and future campus leaders lies in making critical connections between technological possibilities and institutional priorities and using their vision and influence to chart a successful course.”

The Strategies

Having addressed some of the objectives that educational leaders may be considering over the immediate years ahead, the following section explores some of the strategies to help fulfill goals along the way. Some of the topics worth investigation include issues of market expansion, curricula development and delivery, and the changing role of faculty engagement.

Market Expansion

One of the most difficult aspects of considering the market dynamics in higher education is establishing a mindset – especially among traditionalists who decry the commodification of education – where a market way of thought is seen as more than the “outsourcing of higher education’s core purposes of teaching, learning, and service” (Newman, Couturier, & Scurry, 2004, p. 44). The intensified clashing of perspectives has
required a renewed clarification of the core purposes and values of higher education
(Levine, 2001). “The imperative for higher education is to determine the ground rules by
which partnerships with the private sector might be accomplished … This juncture presents
an enormous opportunity” (p. 57). If higher educators fail to debate and plan a strategy to
advance in the new environment, the “system of higher education will likely drift into some
new market-oriented format without adequate restraints and with an ongoing erosion of its
fundamental purposes, a format difficult to change once established” (Newman, Couturier,

Irvine (2003) observed that higher education is in a remarkable transition period
providing an opportunity in worldwide markets, where the “globalized economy is
beginning to transform state monopolies in education and credentialing into more open and
cooperative public and private systems with common economic goals” (p. 93). This shift in
political and economic conditions opens “many new opportunities for e-learning companies
to enter new markets over the long term.” Of course, it also opens many dangers. As the
division between for-profit and public purposes becomes blurred, there is a peril that
“higher education will become – both in perception and reality – just another interest group
devoid of any attributes that raise its interests above those of the marketplace” with its
emphasis on revenue streams, subsidiaries, corporate sponsorships of research, high
presidential salaries, and “other trappings of private enterprise” (Newman, Couturier, &

Duderstadt (2000) argued that it would be the marketplace that drives the necessary
change in higher education rather than governments or the institutions themselves. The new
postsecondary enterprise along with traditional havens of higher education—driven by innovation and consumer demand—will also consist of “computer hardware and software companies, telecommunications carriers, information services companies, entertainment companies, information resource organizations, and corporate and governmental educational organizations” (p. 296).

A significant threat posed by these new for-profit education providers will be as they cherry-pick the more valuable and high-demand subject areas such as business and education, leaving the most costly and low-volume programs to public institutions (Newman, Couturier, & Scurry, 2004, p. 77). College presidents are increasingly concerned over this attack on revenues, since the more popular and profitable programs have been used to “cross-subsidize other activities that do not have sufficient income to support themselves” (p. 79). Furthermore, as competition becomes fiercer for students with higher test scores or wealthier means, “even those colleges and universities that typically are seen as open-door institutions have begun to shift their attention and their resources from low-income students and students of color to the more affluent and easy-to-educate students” (p. 166). Public institutions may counter these pressures by generating revenues from additional sources such as state legislatures, new student markets, new resources for research funding, as well as expanded efforts to generate alumni giving or other private contributions (Gumport, 2001, p. 95).

One likely financial change over the upcoming years will be that funding dollars will more closely follow the students than the educators (Levine, 2003). “With the growth of educational providers and the emphasis on outcomes, public and private financial supporters
will increasingly invest in the educational consumer rather than the expanding grab bag of organizations that offer collegiate instruction” (p. 24). For traditional institutions to best survive, they should consider preserving and promoting critical attributes of higher education’s role in society (Newman, Couturier, & Scurry, 2004):

- Bear responsibility for student learning
- Provide social mobility by moving beyond student access to student attainment
- Protect the public investment by addressing efficiency and productivity
- Support early education providing for better prepared college students
- Conduct needed research
- Serve as society’s critic
- Build civic engagement to sustain democracy

Newer profit-focused institutions have already expressed a reluctance to fulfill all the tasks the public has come to expect from higher educators – such as pure research and promoting social mobility – in that they do not see such tasks as the duty of for-profit businesses (Newman, Couturier, & Scurry, 2004). “Rather, they see only the need to provide skills for successful job preparation,” a position that may erode public support if the perceived nature of higher education changes for the worse (p. 220).

The global marketplace as well is experiencing fundamental changes in the ownership and provision of education, all the way from childhood through adulthood, along with an increase in private-sector involvement (Irvine, 2003). Some of the drivers behind the shift to private providers include increasing numbers of school-age populations and increased demand by adults needing new skills; governments unable to cover the costs; increasing numbers of middle-class students who can afford the education costs; and more corporations needing skilled workers. “The global education marketplace is primed for huge
growth as more governments and organizations open markets for private and for-profit providers to meet education needs were public funds cannot” (p. 74).

Within most developing-world countries, non-state providers of education have been engaged longer and deeper in educational services than the state (UNESCO, 2003). Non-governmental organizations (NGOs) have been major education providers, especially among the poorest and most disadvantaged groups, and commercial education providers are a rapidly growing sector (p. 14). Even in more developed European nations, government leaders are “becoming increasingly aware that education goals can only be achieved by allowing more private and for-profit education providers to enter the marketplace” (Irvine, 2003, p. 87). In order to achieve universal basic education, the worldwide goal is vast: 180 governments have pledged to hire 15 million teachers by the year 2015 to meet the need. It may take decades more for many nations to reach the point of a global marketplace fully prepared provide an Internet-enabled postsecondary education (p. 76).

The United States may yet play a major role responding to the powerful forces changing higher education around the world (Levine, 2003). Still, some academy leaders may fear that American’s colleges and universities could ignore those forces “and the important questions that they demand we confront – or that, simply through complacency or the glacial speed of our decision-making processes, we will fail to respond in time to help shape tomorrow” (p. 25).

Curricula

The rapidly changing world of academia must adjust as a part of the as vast or even vaster changes occurring within the greater social and economic environment – or the real
world, as college students often refer to it. Students entering the higher educational system today will be facing a radically different workplace come graduation as opposed to even a decade ago; currently 60 percent of all employees work in unsupervised, self-managed teams in nontraditional settings or telecommute to work, and within the next decade, as many as half of all workers may be temporary, contract or part-time employees (Kuh, 2001). College curricula will need to modify for this reality where employers are “less interested in how much college graduates know and more concerned about whether they can obtain and apply new information in productive, creative ways and can anticipate and address the emerging needs of their organizations” (p. 288). About 90 percent of current college graduates say their degrees helped them land a job, but they did not learn the skills in college they need to succeed in the workplace (Newman, Couturier, & Scurry, 2004). Employers as well complain about the graduates’ “lack of such skills as critical thinking, ability to write clearly, or ability to work on a team” (p. 55).

Demonstrating a gap between the perspectives of academia and the real world, while higher education faculty report they are “generally pleased with the quality of graduates, only 46 percent of business leaders say graduates know what they need to know” (Newman, Couturier, & Scurry, 2004, p. 73). Legislators are increasingly calling on higher education to become more accountable for preparing students to succeed in the new economy (p. 75). Clearly, this calls for rethinking the purposes of higher education, as well as the curricula and pedagogy.

The university has historically operated under mechanisms apart from direct market dictates and consumer demands. The university, as a privileged and protected dispenser of
accredited degrees, was able to inscribe a curriculum not based so much on what a student or society asked for, but instead what it believed the public needed (Levine, 2003). While adjusting the university program for a changing environment, nonetheless, the curriculum should be such that it goes beyond simple vocational training, while seeking to educate “the whole person for a full life”:

A liberal education that includes such things as cognitive development; emotional and ethical knowledge; preparation for citizenship and membership in a multicultural society; instruction related to family and community life; development of the taste in conduct needed to enjoy the good life; leisure or use and health skills; development of personal traits such as leadership, coping, and adaptability; and, of course, preparation for productive work. (Levine, 2003, pp. 31-32)

Such an aim of holistic, integrative education – blending the needs of the student, the academy, the greater socioeconomic system, as well as the upward growth of an aspiring humanity – is daunting, however worthy. One of the most formidable obstacles to overcome in achieving a more integrative higher education is the inclination to define and defend departmental territory; an atomization of curriculum that divides knowledge into distinct and isolated fields, “even though scholarship, learning, and life have no such artificial boundaries” (AACU, 2002, p. 16). Faculty attempts to work across departmental barriers with a multidisciplinary approach have found some success in altering curricula, however “such integrative approaches still butt against real administrative problems” (p. 16).

Along with a greater integration of academic disciplines, the university has a need to integrate fully its historic core missions as well – research, teaching, and service – with the evolutionary redesign of its curriculum. Higher education has a high duty to address the specific needs of a time, while also serving the timeless needs of humans and humanity. This is the
unique calling of the university, and provides a distinct advantage against the more limited for-profit position in the competitive marketplace. As a highly esteemed part of society, the university has an indispensable mission to maintain and nurture its essential functions in the appreciation, development, protection, transmission, and application of knowledge (Levine, 2003). “With regard to all of these activities combined, we need to recognize that their unbundling would be a disaster not only for the university, but for society” (p. 39).

Another challenge facing curriculum reforms is to ensure that greater portions of society not only have access to higher education – a proposition threatened by the increasing reliance on market forces – but that more students are successful in achieving and applying their learning in the world at large. Access to higher education is simply not enough (Newman, Couturier, & Scurry, 2004). “For a strikingly large share of students, particularly low-income students of color, access has led to disappointment, dropping out, and failure to gain the needed education and degree” (p. 155).

We can no longer afford to allow public policy to stop at questions of access. We must now broaden our goal to include academic success for an ever-expanding share of the population, which includes adequately preparing students and then retaining them once enrolled. (Newman, Couturier, & Scurry, 2004, p. 128)

It is thus necessary to ensure that the higher education curriculum worldwide engages and nurtures all students ever more successfully. Research has found that given the demands of the new economy, “providing low-income and students of color with access and ensuring their degree completion is the best way – arguably the only way – to decrease this disparity” in who fully benefits from an accomplished education, and who does not (Newman, Couturier, & Scurry, 2004, p. 160). Social and economic sources outside of higher education are driving all of academia toward broader access (Trow, 2001).
Technological developments and international competition is swelling the demand for life-long learning and “the value and importance of a well-educated citizenry and workforce to every country. Advanced economies now live and die by the educated labor forces and how they are employed” (p. 115).

Infusing a curriculum with a broader, integrated perspective ultimately succeeds or fails with the level of cooperation from teachers and their pedagogical foundations. University presidents might issue decrees or sign international agreements for global learning strategies, but the final responsibility for academic change resides with the faculty (Engberg & Green, 2002).

*The Changing Role of Faculty*

The role of faculty in traditional higher education goes beyond simply teaching in the classroom. The organization of American colleges and universities is based on the concept of shared governance among the community of scholars, where all members of the department within a discipline are considered equal (Altbach, 2001). This form of governance, however, has problems when considering issues of greater social and even institutional affairs beyond the department. The views of faculty towards such affairs may “often mirror those of the president’s about these issues, but they are generally focused on their own work. They often have little patience with the issues of policy, funding, and public debate,” and often respond to issues such as greater efficiency in a market environment “as an annoyance at best and more often as an inappropriate intrusion” (Newman, Couturier, & Scurry, 2004, p. 80). As market terms such as *outsourcing, privatizing, reengineering, strategizing, and branding* become more prevalent in academic
management, many faculty “are simply concerned with letting business ideology get too embedded in higher education” and that the coveted distance between the marketplace and academia is diminishing too fast (p. 89).

The imposition of market forces on academia through tighter resources, higher student-to-staff rations, and demands for greater productivity has indeed led to pressures for increased efficiency within departments (Trow, 2001), much to the increasing concern of department faculty and the threats to the “economy of the university and the capacity of its scholars and scientists to pursue long-term studies that do not promise short-term results” (p. 112). Faculty has found that academic control is shifting from shared governance, more to “increasingly powerful university administrators and state authorities and to the market through the commercialization of research and teaching” (p. 114).

It is not a matter of administrators seizing power from academics; rather the size and complexity of universities, the variety of specialized problems that confront them, and above all the speed of change increase the necessity for central administration to act decisively and rapidly. Academic committees have many virtues: among them is the capacity to give legitimacy to decisions and policies and sometimes even to add wisdom to decisions and quality to policy. But decisiveness and speed are not among these virtues, and they are more and more required of academic administrators. (Trow, 2001, p. 114)

Academic administrators, in order to deal with the greater market pressures, have been shifting away from the historic governance model of full-time, permanent, and tenured faculty. The new pattern has been to hire more part-time and non-tenure track teachers, creating fears that “the academic community, which was built on the basis of a full-time tenure-eligible faculty, may be seriously eroded by these changes” (Altbach, 2001, p. 23).

The schism between faculty and governance is widened further with an increasing institutional reliance on revenues from extension divisions and distance learning programs,
following policies that would never be allowed in regular degree programs (Bok, 2003). Administrators have granted little financial aid to their extension and distance programs, “while keeping faculty compensation well below the normal scale for the rest of the university. As a result, access to these programs has suffered, along with the quality of instruction” (P. 202). Many faculty members are expressing concern in particular about administrators’ growing reliance on the Internet to provide competitive and profitable distance learning opportunities, with some calling the “new technology is just another way by which university officials can exploit the faculty” (p. 94).

Faculty instructors who have been requested to offer online courses may express concerns over the substantial time demands along with their regular classroom work (Spicer, 2003). With regular classroom instruction, the typical faculty interaction directly with students may typically run some 150 minutes per week, with about five hours a week of office time; yet online teaching “makes the faculty member potentially on-call 24 hours a day, seven days a week” (p. 153) – a prospect many instructors are finding objectionable. Some faculty members have also expressed fear over being replaced by a website (Wilson, 2001). Given the technological advances in content delivery and artificial intelligence programming, it may be a fear with some merit.

There are numerous areas where faculty and administrators alike are confronted with profound changes throughout academia. Duderstadt (2000) observed that change in higher education rarely happens by way of presidential proclamations or committee recommendations, but rather through grassroots efforts of the faculty, students, and staff. Given the diverse interests and frequently narrow focus of those groupings, it may be difficult to mobilize a
unified impetus toward the changes necessary in the new environment. Administrators may find that within the historically deliberative, inclusive, and frequently glacial processes of traditional governance models, “rarely is major change motivated by excitement, opportunity, and hope; it more frequently is in response to some perceived crisis” (p. 64). Some may find that the current challenges and crises facing academe’s administrators and faculty provide indeed a valuable motivator. “Might not competition and the lure of profit be the only forces powerful enough to break through the thick crust of faculty inertia and bring about some real progress in university teaching and learning?” (Bok, 2003, p. 98).

The Tactics

Frequently, clearly identifying a problem area is a large step towards its solution. Much of this paper has been spent in identifying problems and challenges facing higher educators. This final section of the Breadth component will attempt a thumbnail overview of some tactics suitable to help address some of the objectives, goals, and strategies detailed above, particularly in specific action areas such as leadership, pedagogy, and applied technologies.

Leadership

The transformational changes needed throughout higher education to adapt to the new market forces will require institutional leaders articulating a clear vision and applying a focused allocation of resources (Hitt & Hartman, 2002). True lasting transformation will occur “when change is so pervasive that it redefines individuals, institutions, or processes,
and when the result of this change yields such significant benefits that the individuals, institutions, or processes do not voluntarily revert to the old ways” (p. 1). To survive and thrive in the new environment, institutions will need to be flexible and responsive to the market pressures (Newman, Couturier, & Scurry, 2004). If leaders in higher education do not take it upon themselves to bring about the necessary changes, they could ultimately find their institutions “in a position similar to elementary and secondary education, where policymakers have currently defined the modes of setting standards and assessing performance” (p. 146). The definition of higher education is best left to the educators, providing they rise to the demands of the challenge.

Society has a right to expect that higher education is accountable for fulfilling its purpose, especially through its expenditures of public funds (Altbach, 2001). On the other hand, academic leaders need to protect the prime directives of its mission, where faculty are free to teach without political fetters; where the university is free to push the frontiers of knowledge; where knowledge is valued as more than a marketable commodity; where “universities flourish intellectually and financially when they have links with society but at the same time have freedom to pursue new ideas in the classroom and laboratory” (p. 28). The guardians of higher education may best serve its higher calling by being wary of straying too far from the purposes the public has come to expect and respect. If higher education is to become fragmented and misdirected in its mission, the loss of public support could well cost all academic institutions, for-profit or not. Some of those fundamental purposes, many of them touched on elsewhere in this paper, may be:
• Improve the quality of learning so as to ensure the skills and knowledge that will be required for the workforce.
• Improve the quality of learning so as to reflect the skills, knowledge, and commitment required for active participation in the civic and social life of the community.
• Provide access and academic attainment for a steadily broadening share of the population of all races, ages, ethnicities, and socioeconomic backgrounds, focusing particularly on access and attainment for those currently underserved.
• Serve as an avenue of social mobility for lower-income and minority citizens.
• Serve as the location (virtual or physical) of open debate and discussion of critical, and often controversial, issues of importance to the community.
• Support development of high-quality elementary and secondary education through improved education of teachers and school leaders, alignment of curriculum and purpose with the schools, assistance with local reform, and improved research about education.
• Undertake research and scholarship in a manner that is trustworthy and open, in a widening array of fields that serve to advance society.
• Bring the benefit of the knowledge and skills accumulated in colleges and universities to the benefit of the community through outreach and service. (Newman, Couturier, & Scurry, 2004, pp. 83-84)

All of these purposes should be continued and expanded, even as enrollment demands are rising, funds are dropping, and market forces require competitive pricing. Institutional leaders may be increasingly faced with tighter budgets while called upon to produce more. Twigg (2003) proposed three basic approaches to reducing costs. First, an organization could seek to maintain a consistent level of service while reducing the amount of expended resources. Second, it could seek to increase services and enrollments while maintaining the same level of expenditures. Third, it could reduce costs by reducing course repetitions. “At many community colleges, for example, it takes a student about two and a half times to pass introductory math courses” (pp. 129-130).

As institutions seek additional revenues through expanded services such as extension programs and distance learning, old-school leaders may need to adopt new models of governance with a “level of dynamism and flexibility dramatically different
from traditional faculty governance models. It is highly unlikely that ‘bolting on’ a
distributed learning model to our existing structures will achieve the needed flexibility,
nimbleness, and responsiveness” (Oblinger, Barone, & Hawkins, 2001, p. 13). There are
a number of issues higher-education leaders should consider as they evolve their
institutions into the new learning environment including development of competitive
distance learning programs:

- **Speed**: How quickly can the organization respond to change?
- **Money**: How much funding is available for new projects? Who controls the money?
- **Talent**: Do we have the best people to get the job done?
- **Alignment**: How well aligned is e-learning with the rest of the institution?
  (Oblinger, Barone, & Hawkins, 2001, p. 13)

Few sectors of society benefit from the prestige of high public respect as much as
the institutions of higher learning. Perhaps most importantly, especially in the age when
cynicism is rampant and bad news is instantly disseminated, institutional leaders may best
serve academia by ensuring that the rhetoric of higher education is a credible match with its
reality.

The rhetoric describes devotion to student learning, while in reality the student bears
principal responsibility for learning and for any failure. The rhetoric describes
devotion to teaching, while in reality the overwhelming time, energy, and creativity
of the faculty at four-year institutions are devoted to research, publishing, and
outside consulting. The rhetoric calls for broader access to higher education, while
merit-based financial aid programs are increasing at a greater rate than need-based
financial aid, and institutions are focusing more and more on recruiting the best and
wealthiest students. The rhetoric calls for service to the community while attention
is focused on improving rankings such as those in *U.S. News & World Report*. The
rhetoric proclaims the importance of fundamental and trustworthy scholarship that
serve society, while in fact its partiality is undercut by growing corporate control of
research and faculty conflicts of interest. The list of such fissures between higher
education’s rhetoric and its performance is long, and it is growing. (Newman,
Couturier, & Scurry, 2004, pp. 66-67)
Pedagogy

The radical change in higher education calls for a new pedagogy – one that is interactive, inclusive, suitable for and competitive in a global marketplace. Keller (2001) suggested that higher education is moving away from a teacher-led pedagogy, to one more learner centered. This pedagogical shift is a match with the other pressures in the academic marketplace toward better planning and decision making, financial management, and changes in strategy – a shift that “tends to pull professors toward a professional serving role and away from a commanding governing role where they design what the students should learn and how and when they can learn it” (p. 319). The focus becomes what the students have actually learned, rather than what they were taught. With this change in emphasis from the “institutional process to educational outcomes, degrees will become far less meaningful. A transcript of each student’s competencies, including the specific information that the student knows or the skills that he or she can perform, will be far more desirable” (Levine, 2003, p. 23).

This shift in pedagogical foundations is more profound than it may seem. For centuries, the primary form of competition between universities and colleges was in levels of prestige. This has grown even more intense over the last decades with the greater prominence of published rankings (Newman, Couturier, & Scurry, 2004). However, the measurement of institutional prestige as a criterion for educational quality “does not serve the public need for quality in terms of student learning. It will take carefully structured interventions to overcome the current form of competition” (p. 87). Once again, the difficulties in changing patterns of a belief system are onerous for academic leaders. The
guardians of higher education might be served to consider that the “way to chart a course for the future is to understand that embracing a legacy does not necessarily mean staying the same; nor does becoming more market-savvy mean pulling up anchor and letting loose in the currents” (Gumport, 2001, p. 106).

One of the most important pedagogical changes in higher education may need to take place before the students leave the earlier levels of education behind. Many Americans believe that a major problem in better access to higher education is hindered by the perception that graduates of elementary and secondary schools are unprepared and inadequately motivated for the challenges of higher education and lacking in necessary support systems (Newman, Couturier, & Scurry, 2004).

Everyone needs support, like the boost more affluent students get from years of music lessons; test preparation programs; rigorous high school curricula; and high expectations from their parents, teachers, and community. Research has shown the culture of low expectations of and for low-income students and students of color, along with a lack of access to rigorous high school curricula, undermines their chances to enter higher education prepared and ready for college-level work. (Newman, Couturier, & Scurry, 2004, p. 161)

Once students are within the systems of higher education, an operational pedagogy should see they are more than simply passing through the conveyor belt of courses toward the end product of a degree, but are rather integrated members of a lifelong educational process (Duderstadt, 2000). “In this model, the university would commit itself to a lifetime of interaction with its students – once a university student/graduate, always a member of the university family – providing them throughout their lives with the education necessary to respond to changing goals and needs” (p. 284). The concept of a traditional self-contained degree may be of limited use in a changing world “where information and skills become
quickly obsolete” and new educational tools such as the cyberspace university make it possible to provide people with the learning they need, when they need it, wherever they happen to be (p. 284).

Such new models of curricula and pedagogy should see student work as more than a collection of independent courses, but as “pathways for learning … graduating intentional learners – empowered, informed, and responsible” (AACU, 2002, p. 30). To achieve this end, our policies and pedagogies should reflect the diversity of participants and needs served by higher education, where it is “no longer an effort to educate a small segment of the population for leading positions in society, but something close to a continuing education for the whole population for life in the twenty-first century” (Trow, 2001, p. 132).

The classroom dynamics of the student-centered education are a flip from the more traditional model. “Rather than having teachers work hard while students listen, the student-centered environment expects the students to work hard while the faculty member listens” (Wilson, 2001, p. 205). In the student-centered class, the teachers may be found sitting in the back of the room, observing, commenting when necessary, and even resting a bit since most of their energy was invested in the design (Twigg, 2003).

If you walk past a traditional classroom, the faculty member is standing in the front, waving his or her hands, presenting his or her slides or writing on the board, while the students sit quietly taking notes. In these new classrooms, when you walk past and look in, the students are doing all the work. They are waving their hands. They are showing their fellow students examples of projects. (p. 139)

Some have accused the old-school style teacher-centric educators of entering an “unspoken, comfortable conspiracy between faculty and students not to bother each other too much,” where mediocrity reigns (Newman, Couturier, & Scurry, 2004, p. 136). That
type of teacher in particular may argue or fear that a student-centric model panders to the wishes and whims of its students. “A student-centered environment, however, does not do this. It is designed to provide for the needs of its students, not simply to gratify their desires. The student-centered environment requires more of the student, not less” (Wilson, 2001, p. 205).

Especially challenging for higher educators – given the new environment of student-centric education of lifelong learners mixed with those just starting out, the increasingly diverse classroom mixtures of age, income, professional standing, compounded with the countless American subcultures as well as the myriad of world cultures engaged in a global virtual university – given all this, just how does the instructor find common classroom ground? The benefits of access, inclusion, responsiveness to student needs and market demands are “bought, in part, at the price of intellectual incoherence in the curriculum” (Trow, 2001, p. 119). Teachers in the new educational environment cannot assume “a common body of knowledge, or even of interests,” and may only find cultural commonalities in such superficial areas as “popular entertainment or sports or the shared fascination with their search for friends and mates and identity” (p. 119). Using common reference points in a high-diversity classroom may make it “easier to work past the inevitable misunderstandings that arise from differing cultural expectations, the nuances of different languages, and the implications of different historical experiences” (Keohane, 2001, p. 187).

Especially in settings with increasing numbers of international students as institutions seek to expand their enrollments beyond national borders, curricula and pedagogies may need to be adapted to a wider array of cultural and linguistic differences (OECD, 2003). Wilson
(2001) proposed there is simply not enough time in the highly diverse classroom “to bring forward examples that appeal to everyone’s interest and draw on everyone’s experiences” (p. 206). The instructor may have to rely on a limited set of options to illustrate a concept, based upon a limited knowledge of student interests, experiences, learning styles, abilities, and so on. This limitation may be mitigated through the use of a technology-enhanced environment, where “one need not restrict the number of examples or make often-unwarranted assumptions about the characteristics of the students” (p. 206).

While higher educators may devote an enormous amount of pedagogical effort to teaching the precise methods of science and rational thought, education may be served by expending efforts to address the narrative realities of students’ diverse perspectives and ways of living that occupy the bulk of their hours (Bruner, 1996). The benefits from advancing such cross-cultural fluency in the classroom may translate into valuable skills beyond the academic degree. The ability to find common terms and reference points, even in an attenuate form, is a “valuable asset in an increasingly global world. Corporate, nonprofit, and governmental leaders increasingly have no choice but to engage in multinational cooperative endeavors” (Keohane, 2001, p. 187). This is an especially important skill to develop in American students, where the perceived supremacy of the United States in scientific, economic, and military circles – along with the use of English as the global language and the international prestige of American universities and colleges – have “fueled the American tendency to believe that our own history, language, and culture are all that matter” (Engberg & Green, 2002, p. 7). To counter this, broad-visionary
instructors should develop a multicultural perspective, continually striving to find common ground between diverse individuals, especially in the classroom.

A multicultural perspective permits disagreement without anyone necessarily being wrong. If culture in all its complexity is understood as an individual’s attempt to navigate the river of life, then cultural differences can be understood simply as pragmatic acts of navigation and can be judged accordingly. (Cushner, McClelland, & Safford, 2000, p. 68)

The American models of learning may set a pattern for the rest of the world to follow, and we may retain prominence as the nation of choice for international students. However, “we cannot claim to have the best system of higher education in the world unless graduates can free themselves of ethnocentrism bred of ignorance and can navigate the difficult terrain of cultural complexity” (Engberg & Green, 2002, p. 7).

**Applied Technology**

The new higher educational environment is being challenged on numerous fronts, from larger and more diverse classrooms full of students, to the market pressures pushing through the inertia of traditional academics. Perhaps one of the largest challenges to the classroom paradigm today is the revolutionary introduction of new technologies. These newfound tools and techniques may integrate themselves in academic settings such as the traditional classroom with PowerPoint lectures punctuated by multimedia clips of audio and video; distributed learning opportunities where the students can access additional course materials, exercises, discussion boards, and so on over computers either in a campus lab or at home; and fully online courses through one of the growing number of distance learning institutions and companies. Some prefer the term *distributed learning* to the term *distance learning*, to provide a better distinction between the concepts, though both share a common
use of new technologies (Oblinger, Barone, & Hawkins, 2001). Distance learning may be seen as a limited subset of distributed learning, “focusing on students who may be separated in time and space from their peers and the instructor”; while distributed learning can “occur either on or off campus, providing students with greater flexibility and eliminating time as a barrier to learning” (p. 1).

Academic leaders are feeling the market pressures to expand the effective application of new technologies. The drivers behind these pressures are not so much the faculty – “who have by and large optimized to their teaching effort and their time commitments to a lecture format” – but the contemporary students who are citizens of a digital age:

They have spent the early live surrounded by robust, visual, interactive media – not the passive broadcast media, radio and television, of our youth, but rather Nintendo, home computers, the Internet, and MUDs and MOOs, and virtual reality. They learn by experimentation and participation, not by listening or reading passively. They take no one’s word for anything. Rather they embrace interactivity, the right to shaped and participate in their learning. They are comfortable with the uncertainty that characterizes their change-driven world. (Duderstadt, 2000, p. 82)

A survey of college freshman found that some 40 percent of them report they are bored in class – a 65 percent increase in the boredom rate since 1985 (Newman, Couturier, & Scurry, 2004). Increasingly the students believe that “better pedagogy can make learning exciting” and they are also increasingly willing to look outside their university or college for transferable courses that may provide more effective and interesting learning (pp. 100-101). Duderstadt (2000) found that though students may tolerate for a time the “linear, sequential lecture paradigm of the traditional college curricula,” it is not the way they learn best; instead, they “learn in a highly nonlinear fashion, by skipping from beginning to end and
then back again, and by building peer groups of learners, by developing sophisticated learning networks.” (p. 83). This is a learning style well suited for the computer age.

The application of new learning media poses many pedagogical issues to address. For example, how to teach online without the use of visual clues essential to effective human communication, how to design manageable class materials so students might efficiently find and navigate them on a course website, “how to convey complex ideas that have subtle nuances without direct interaction,” and so forth (Spicer, 2003, p. 152). Furthermore, given faculty concerns over increased workloads and a 24/7 work environment as institutions seek to maximize student enrollments with low incremental costs, there is an impetus to determine how can the online learning environment be made appealing and effective with “as little feedback and personal attention” as an instructor might get away with; a calculation that “could result in courses presented in superficially attractive formats but with little of the active learning that educators consider most valuable for the student” (Bok, 2003, p. 96).

Traditional institutions may balk at the high cost of developing online courses, especially given the number of challengers who have spent years of experimentation with pedagogy, content delivery, technical infrastructure, and support systems that may require investments sometimes exceeding $1 million per course (Oblinger, Barone, & Hawkins, 2001, p. 11). Faculty may be concerned that the new technologies are beyond them, and that they may be replaced by others more advanced or by the technology itself. Distance education innovator Matthew Pittinsky (2003) offered consolation in that “although the experience of education will certainly be different, the technology inevitably will be driven
by the pedagogy, and ensuring that our core values remain the same” (p. 11). Furthermore, ongoing research into cognitive science has demonstrated the fundamentals remain true:

> Students learn more from doing than from watching. Students learn better when engaged in group activities instead of solo activities. Students learn as much from one another as from the professor. Students learn more when more is expected of them. Students have a diversity of learning styles, interests, and experiences. None of these insights has anything to do with technology. (Wilson, 2001, p. 214)

What the new technologies do allow, coupled with tried and true pedagogical processes, is the ability to develop “highly interactive classes that make good use of simulations, case-method discussions, games, and other means of provoking discussion among students and instructors,” however initially expensive those types of courses might be (Bok, 2003, p. 170). Much of the technology applied to higher education to date has been little more than new gadgets bolted on to existing educational tools (Twigg, 2003).

However, with the rapid hardware and software innovations, before long newer information technology will provide human interaction in a high-definition and three-dimensional telepresence, allowing for distance education to seem comparable to a face-to-face experience (Duderstadt, 2000). Already the current experience with the asynchronous distance learning process can be just as effective as the classroom experience, in terms of learning and costs (p. 229). Bok (2003) suggested, “In some respects, the Internet may actually be superior to a regular seminar”:

> It can elicit more considered responses and wider participation, especially by students reluctant to express themselves in a classroom before their peers. In certain classes, such as those involving complex lab experiments, the new technology can allow students to familiarize themselves with equipment in advance or observe the manipulate simulated material in ways more effective than normal teaching methods allow. In courses assigning problems with
exact answers, students can receive instant feedback for homework submitted on-line. (Bok, 2003, p. 88)

Twigg (2003) has identified a number of interactive materials that instructors may provide, and some of the benefits that come from them, including interactive tutorials and exercises that provide self-paced student practice; computerized low-stakes quizzes which provide feedback, repetition, and reinforcement; interactive experience with abstract concepts, where the students employ hands-on experience analyzing and collecting data; and numerous linked examples from various disciplines where students can follow their own paths of interest and learning styles (p. 126).

Higher education administrators and faculty have numerous resources to turn to as they develop their distance learning programs, including case studies, how-to books, and countless journal articles. They may also be served by following the best-practice examples discovered so far by leaders in the global e-education industry:

- Education offerings must be demand-driven and serve marketplace needs.
- Technology and business models must be scalable.
- Education providers must exploit the 24/7/365 ubiquitous, on-demand learning environment of the Internet.
- Education providers must work toward standardization of credentials and transnational marketplace acceptance.
- There must be dependable infrastructure and user access.
- Education providers must find strategic partners to add competencies that solve marketplace problems. (Irvine, 2003, pp. 103-104)

Levine (2003) observed that there is no need for all American institutions of higher learning “to morph into click or brick-and-click entities” providing 3,600 different online programs, and that only a small number of online educators will ultimately dominate the market (p. 29). Indeed, many students are still going to prefer the traditional campus experience, though some educators fear that this traditional experience “will be available to
only the most affluent, best, and brightest in the nation. Others will be forced into cheaper 
click education” (p. 26).

Beyond the United States, many nations are hoping that distance learning may 
provide expanded access to higher education, especially for those who may be precluded 
from other options. International analysts have determined that distance learning will play a 
“decisive role in the creation of the global knowledge-based society,” and that the global 
classrooms have already been proven successful through emerging global communication 
networks (Moore & Tait, 2002, p. 10). While the international use of open and distance 
learning is “predominantly represented within higher education, it is also beginning to be 
used in schools” (p. 11). However, this transcultural nature of distance learning may create 
problems concerning local governments and publics, in the fear that their local cultures “can 
be threatened by the international culture of developed countries” (p. 11).

Open and distance learning of a lower-tech sort such as correspondence courses has 
been around for about 100 years in developed nations, and developing nations have one or 
two generations of experience with distance learning (Moore & Tait, 2002). Especially in 
the low-income but high-population countries of the world, the new technologies are seen to 
promise significant learning opportunities even though lack of Internet connectivity, 
regional bandwidth, local access and professional competence pose barriers (Irivne, 2003; 
Moore & Tait, 2002). The regional disparities are great, as “some of the regions with the 
largest populations (i.e., India, China) also have the lowest concentration of telecom 
infrastructure and computers” (Irvine, 2003, p. 89). In some countries, the demand for 
higher education is “actually driving the adoption of computers and the Internet, a move that
will create economic growth and a new business environment,” though the earliest markets will be in areas with high teledensity – concentrated telecom systems (p. 80). Nevertheless, the new technologies “of educational delivery have come to stay, and many countries are looking at open and distance learning as a major strategy for expanding access, raising quality and ensuring cost-effectiveness” (Moore & Tait, 2002, p. 10).

To accommodate the increasing demand for language and cultural diversity in the globalization of distance learning, there will be a huge market demand for appropriate course materials, and numerous education companies and universities are now creating content and programs in multiple languages (Irvine, 2003). Trow (2001) predicted that all of Europe might come to provide universal access to lifelong learning “by way of work-based instruction over the web for upgrading the skills and knowledge needed by an educated labor force and the global economy … The most profound effects of IT will be to weaken the distinction between life and learning” (pp. 138-139).

Many of us who have been involved with the Internet and education for 10 years or more were motivated early on by the great potential to use technology to change education paradigms: to build environments for learner-centered knowledge and information exchange and to provide greater access to knowledge around the world, especially to people who may never see a university campus. These motivations remain, and a new industry is emerging that has the potential to make global access to learning and knowledge a reality. There will be no greater economic force for the long term than education, and the emerging global education industry will be a major world force for many years to come. (Irvine, 2003, p. 105)
References


