This paper, written in 1991, examines some of the problems related to technological and cultural change common to American, British, and continental universities citing, for example, global competition; adaptability of the national workforce; changing concepts about the role of higher education; changing relationships among business, governments, and universities; and pervasive cultural changes. The paper forecasts that national success in dealing with these challenges will be significantly influenced by the economic unification of Europe in 1992, the reunification of Germany, and changing relations of eastern and western European nations. Sections of the paper focus on the following issues: (1) the intersection of universities and national policy as it relates to an educated, well-trained workforce; creative research and development responsive to national needs; and effective leadership and management, and providing examples of how different countries are dealing with these issues; (2) various structural administrative and organizational models; (3) adaptive organizational structures, such as the National Aeronautics and Space Administration in the United States, that have responded effectively to significant changes in the environment; (4) differences in American and European administrative structures and functions; and (5) possibilities for American, British, and continental universities to establish inter-institutional programs and activities. (Contains 23 references.) (SM)
ADMINISTRATIVE AND ORGANIZATIONAL STRUCTURES IN AMERICAN, BRITISH, AND CONTINENTAL UNIVERSITIES

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A briefer version of this paper was prepared for the 1991 EAIR Conference in Edinburgh. In the author's absence, the original paper was read by Dr. Larry G. Jones, a professional colleague and fellow staff member in the Institute of Higher Education.
The common problems of American, British, and Continental universities are related to the many common challenges of technological and cultural change in the U.S. and western Europe. The development and use of advanced technology in a global economy have led to: (a) intense international competition in a global economy, (b) widespread concern about the adaptability of national workforces and their capabilities for technological competition, (c) changing signals about the role of higher education in training and developing national workforces, (d) rapidly changing relationships among business, government, and universities, and (e) pervasive cultural changes in an interdependent environment.

National success in dealing with such common challenges will be influenced significantly by the economic unification of Europe in 1992, the re-unification of Germany, and the changing relations of eastern and western European nations. Many observers and analysts foresee stronger ties between European and North American countries as an effective counter-balance to Japan and the Pacific Rim. Other analysts see in the re-unification of Germany the forebodings of the European Community's success or failure. And the many changes in Eastern Europe alter, in various ways, national expectations in a global economy that must be cooperative as well as competitive.

The changing role of higher education is evidenced by many changes in public perceptions and expectations. Throughout the 1980s, as international competition intensified, universities were challenged to contribute more effectively to economic growth, development, and competitiveness. With the increasing recognition of a technology-driven economy, competitive advantages that were once taken for granted underwent extensive reassessment. To an appreciable extent, competitive advantage in international markets was dependent upon technological innovation and the quality of research and development in science, engineering, and technology. Thus, reassessment gave a better appreciation of human knowledge and competence as crucial factors in international competitiveness. To become more economically competitive, strenuous efforts
were directed to ways in which nations could become more educationally competitive. Schools and colleges were perceived as valuable national resources in economic growth, and the internationalization of university curricula was increasingly viewed as essential to national productivity and competitiveness.

In the U.S. and Great Britain the many challenges of international competition came at a time when the value or excellence of education was much in doubt. The popular press, in particular, gave extensive coverage to the failing quality of public education and to the role of higher education in making the U.S. economy more competitive in international markets. Technological innovation and change were frequently featured as a national challenge and as a solution to educational problems. With the close of the 1980s the re-unification of Germany and the forthcoming economic unification of the European Community in 1992 gave added emphasis to national interests in international competition. Prospects for stronger economic ties between a unified Europe and a more competitive America resulted in positivistic analyses of national workforces in the year 2000 and the part that education (and training) must play in creating more innovative and productive workers (See Boyett and Conn, 1991; Silva and Sjogren, 1990). Closely related to all discussions concerning the development of a more creative workforce were the various efforts to reform undergraduate college curricula and thereby enhance American knowledge of other nations and cultures (Groennings and Wiley, 1990; Fincher, 1991).

Universities and National Policy

The interactions of rapid technological and cultural change have produced an international community in which universities are challenged by many common issues and problems. Among the major issues are national concerns for: (1) an educated, well trained, and highly productive workforce, (2) creative research and development that is responsive to national needs in international competition, and (3) effective leadership and management at all levels of authority and responsibility. Each of these issues is related to the working relations of universities and government and to their cooperative efforts with industry and business.
In the U.S. a pronounced emphasis has been placed on: (a) the assessment of educational outcomes for purposes of accreditation and accountability, and (b) cooperative partnerships with business corporations that will facilitate technological innovation and productivity. In the universities of western Europe there is a similar demand for: (1) improved quality, (2) increased diversity, and (3) effective institutional management. The university’s major functions of teaching, learning, and research are increasingly relevant for economic competition and new technologies in development, production, and services are an expected outcome of public support. The internationalization of higher education is related, of course, to the international mobility of university students and graduates within the European Community (Teichler, 1991).

Bearing directly on all such issues is the effectiveness with which the universities of eastern Germany will be integrated with the universities of western Germany (El-Khawas, 1990). The emphasis placed on specialized institutions, external research, and manpower planning in eastern Europe is a challenge to the emphasis on graduate education and research in universities elsewhere. Other challenges are seen in decreased public expenditures, improved efficiency in university-based research, and strengthened competition between institutions (Naumann and Krais, 1991).

British universities are challenged by the Reform Act of 1988 and the uncertainty of academic markets in an environment of closer control by the central government (Moodie, 1991). Changes in funding policies have encouraged both universities and polytechnics to seek additional funds through training, research, and consulting services to commercial firms—and through additional grants or gifts from foundations and other institutional benefactors. British universities are now authorized, and thereby encouraged, to market inventions resulting from research and development.

Dutch universities are challenged by changes in university-government relations that involve restructuring and deregulation. Central control over the universities has been reduced and university responsibilities for research and the transfer of knowledge have been increased. Other changes in institutional responsibilities are seen in strategic planning, management control, and internal regulations (van Vught, 1991).
In France the universities have been granted additional autonomy but they are still subject to "a high degree of central government control." They now have opportunities to develop more professional degree programs for students who are more career-oriented than their predecessors. To cope with the increased enrollment of students and the diversity of programs, a national committee on evaluation has been established to encourage self-assessment (Bienayme, 1991).

In brief, university-government relations have changed significantly during the 1980s. Institutions of higher (or tertiary) education are challenged to respond more effectively to public demands and expectations, to diversify their degree programs, and to become more directly accountable for their use of public resources. Changing university-business relations reflect an environment of interdependency in which the professional and technical services of universities play a larger role in national well-being and international competition. All such changes imply a national need for universities, business, and government to cooperate more effectively in order to compete internationally.

Administration and Organization

Burton Clark (1990) has proposed that U.S. institutions of higher and postsecondary education provide a structural model for the world. Higher education in the U.S. is a complex array of institutions and programs, but its many structural and functional characteristics are responsive to the particular needs and interests of the American people. Thus the administration and governance of American colleges and universities reflect decentralization and centralization on different occasions and at different times. In similar manner, American universities are committed to both competition and cooperation—and to national, state, and local initiatives.

Another well respected scholar, Philip Altbach (1991) has suggested that worldwide the European university is our one common academic model. The universal pattern for higher education was established at the University of Paris in the 13th century. The professor, instead of the student, is still the center of the university and the university's autonomy is still an essential feature of our academic ethic. Some of us would argue that further adaptations
will be needed in both American and European universities before they can serve adequately as models for the future. Universities are traditionally organized as colleges and departments that owe their primary allegiance to academic disciplines, and professional societies often control the incentives and rewards for which the professoriate works. Other kinds of organizational structures are often necessary for faculty members to conduct research and to provide instructional services to offcampus constituencies of the university.

Given the range and complexity of technological and cultural change, the contemporary university needs adaptive organizational structures that can respond more readily to changing demands and expectations—and thereby facilitate innovation, creativity, and productivity. Universities also need administrative structures that encourage and implement organizational climates in which innovative and adaptive leadership can flourish.

Adaptive Organizational Structures

As one example of organizational effectiveness in responding to "a significant change in the environment... that raises a new and urgent need or presents a new opportunity," we can look to the early successes of the National Aeronautics and Space Administration (NASA) as discussed by James C. Webb (1969) in his book, *Space Age Management*. Webb was the top administrator at NASA from 1961-1968 and is closely identified with the success of the Mercury, Gemini, and Apollo projects. In his judgment, "organizing, administering, and re-organizing" is the key to effectiveness in projects where the knowledge, technology, and resources already exist. Thus, large-scale organizations require "unusually complex" managerial skills and continuing support. Among the former he listed "high intelligence" and creativity. With respect to the latter, he mentioned sustained public interest and willingness to pay. Organizations, such as NASA, always have important secondary and tertiary effects that alter the environment in which the organizations function. Needless to say, some of the secondary effects are political or social. Such organizations always include a number of intangibles because "new ways of doing things" lead to resistance or dissent.

NASA, as described by Webb, was an adaptive organizational structure in which its leaders constantly prepared for administrative
conditions that could not be foreseen. The leaders sought patterns of organization and administration that facilitated signals of incipient failure or emerging opportunity. In Webb's thinking, adaptive organizational structure and effective administrative performance were both necessary; one without the other would never be sufficient. The challenge to NASA was explicit: the organization was to design, build, test, and launch space vehicles. The criteria would be evident when a man landed on the moon and safely returned. Webb apparently took pride in a formal organizational structure that did not differ greatly from that of other federal agencies. He noted, however, that leadership and close supervision were essential and he stressed the importance of work habits and procedures that fostered innovation.

Throughout his book Webb stresses "allowances for... the unknown and the indeterminate." Administrative leaders should discount the assumptions and projections of systems engineers and computer models, recognize that the "new art" of management was similar to the "old art" of government, and keep in mind the overall objectives of the organization as a whole. He apparently believed in (and practiced) "a kind of participative and collaborative judgment-forming process" that involved various levels of authority and coordinated efforts to draw conclusions from the massive data generated by the NASA projects.

NASA, under Webb's leadership, fulfilled its mission well and it remains an exemplary case study of an adaptive, responsive, mission-oriented organization that achieved its objectives in commendable fashion. NASA is also an excellent example of how a nation's scientific, engineering, technological, and professional manpower can be mobilized in pursuit of national objectives that include numerous advantages and benefits for all participants. As a successful national venture, NASA was quite effective in its collaboration with American industry and with the nation's research universities. The nation's research-and-development talents and expertise were recruited wherever they might be. A highly commendable feature of NASA policies was its effort to seek the contributions of the nation's emerging research universities, as opposed to previous federal policies that would have included "only the nation's best."
In such ways, NASA had a pronounced influence on U.S. universities and business corporations. Systems science, engineering, and technology contributed innumerable concepts, principles, and products that affected, in various ways, university planning, management, and operations. As later experience revealed, the concepts and principles of space age technology were not readily transferred to societal issues and problems, but their impact on business corporations and universities was significant and enduring.

The benefits, advantages, and effectiveness of adaptive, innovative organizational structures have been demonstrated more recently by: (1) multinational business corporations that finance, design and develop, manufacture, and market consumer goods—with each phase implemented in different countries; (2) telecommunication industries that facilitate the rapid and continuous flow of "voice, image, and data" (i.e. news, information, and investments) across national border; and, of course, (3) the formation of the European community—and its various internal structures for a common market, a common currency, and eventual economic unification. Each is an adaptive, innovative organizational structure that responds effectively to technological and cultural change.

American universities are often under intense pressure to adopt the organizational structures that are effective in business and government. The adoption of modern management techniques—such as corporate planning models, program budgeting, management-by-objectives, zero-based budgeting, and program evaluation—were not only advocated during the 1970s but often mandated by funding agencies. To plan, manage, and evaluate their many additional functions and responsibilities in research and public service, universities freely adapted concepts of project management to their own uses and made generous use of laboratories, centers, and institutes as mission-oriented organizational structures. Many of these extra-departmental agencies began as project-centered agencies that were sponsored by outside funding. With success and continued outside funding, the mission of institutes and centers expanded to include new functions, activities, and programs—and thereby become permanent features of the academic landscape (Fincher, 1987).
Administrative Leadership

American and European universities may differ in administrative structures and functions as much as any other observable feature. In the U.S. the college president assumed a visibility and dominant role that has continued throughout the 20th century. In the majority of American colleges and universities authority is vested by lay governing boards in the presidents of institutions and not in their faculties. Other administrators and all faculty members thus conduct their daily business with such authority as delegated through the president.

Comparative studies of administrative structures quickly disclose their hierarchical and bureaucratic characteristics. Universities in the U.S. continue to be organized as colleges or schools, with discipline-centered departments as the basic academic or instructional unit. With growth and expansion during the 1960s universities added a vice presidential level of administration that represented (more or less) a functional division of administrative responsibility. Vice presidents for academic affairs were responsible for faculties, degrees, and programs. Vice presidents for research were responsible for sponsored research, and vice presidents for public service were responsible for continuing education, offcampus centers, and other forms of non-credit instruction. Vice presidents for student services administered non-credit programs and activities for students while vice presidents for business and finance served as the institution's chief fiscal officer. Later additions to the vice presidential corps have included vice presidents for institutional advancement and/or development and such other administrative functions that may be deemed worthy of vice presidential status and representation.

As used in European universities, the administrative titles of chancellor, vice chancellor, rector, principal, master, and tutor amaze and confuse American students of higher education. Such titles suggest a diffusion and a concentration of administrative responsibility that is antithetic to graduate and professional education—and to basic and applied research—as seen in modern, large-scale universities. In addition, there is often a deference to European ministers of education that is never shown to U.S. secretaries of education. Nonetheless, there are many functional similarities in
organizational structures that imply similar administrative functions and responsibilities. Academic decision making in all universities is evidently a prolonged, deliberative process in which negotiation and compromise play a heavy role. Policy decisions may be more centralized in European universities, but the implementation of policy is often diffused in subtle ways by university faculties and academic departments.

The organizational charts of U.S. universities are elaborate and show a host of associates and assistants reporting to vice presidents. As the administrative structure expands, associate and assistants are appointed to positions in which they report to deans, department heads, and directors. The variations in administrative titles thus are enormous and yet stereotyped. Given the organizational capabilities of American institutions and the "state of the art" in organizational theory and research, the lack of innovation in administrative organizational structures is amazing. Very few American presidents have been recognized as organizational geniuses. At best their efforts to organize colleges and universities are limited to administrative staffs, academic and/or administrative councils, and the general administrative structure of the institution. Very seldom can a president exercise his or her organizational skills in dealing with the basic instructional divisions or departments of the university.

The lack of innovative administrative structures in higher education is apparently matched by the great reluctance with which institutions educate, train, or develop their own leaders. No American university offers a degree in which students can specialize in the duties and responsibilities of a college presidency. Despite widespread development of doctoral programs in higher education they are not widely regarded as adequate preparation for presidential leadership. And yet, the career patterns of many college presidents involve an early commitment to administration and suggest that opportune beginnings should be in an administrative position not too far removed from the president's office (Kerr & Gade, 1986).

The means by which administrative leaders are identified, educated, developed, selected, appointed, appraised, and reassigned are severe handicaps in the contemporary university's effectiveness. All such limitations are unaware of the de facto professionalization of institutional leadership in much the same manner
that other occupations have become professions in contemporary society. The professionalization of business management is readily cited as an embarrassing contrast. Beginning in the 1950s a concerted effort was made by American business colleges to develop programs of formal preparation for managerial and executive responsibilities in business corporations. The Harvard MBA (master of business administration) serves as prototype of such programs, and the increasing demand for business degrees serves as the best indication of continuing success in placing graduates.

The increasing popularity of the MBA degree in Europe gives further evidence that management education and development for business executives is not only desirable but increasingly necessary. Some irony may be involved, however, in the coincidence of adoption of the MBA by European institutions and increasing criticism of the MBA by U.S. business leaders. Indeed, management education and development has been the subject of an intensive three-year study (Porter and McKibbin, 1988) with conclusions and recommendations that send “new signals” to university business and management programs. Among these changing signals are many indications that innovative and effective leadership will be needed to meet new situational demands and the unpredictable consequences of rapid technological and cultural change.

In international business there is an obvious need for the continuing professional education of executives, managers, and staff specialists. Comprehensive management development programs are regarded as an effective means to successful competition, and lifelong learning for business executives is widely advocated. Inservice development programs have long been recognized as a responsibility of U.S. business corporations and as an area in which corporations and universities cooperate most effectively. As a result, management education and development are now a multi-million-dollar business. A pervasive theme in many management development programs is strategic planning and decision making; a strong emphasis is placed on “adaptability to change” and innovation is depicted as an essential characteristic of the organizational culture in which business corporations thrive; the future chief-executive-officers of multinational corporations are envisioned as “master strategists” and “inspiring communicators.”
Thus universities have long been involved in the education, training, and development of business leaders. In similar manner, they are now more actively involved in the formal preparation, inservice development, and continuing professional education of government, community, and other public leaders who serve in many ways the public interest, as well as the agencies, associations, and organizations they lead. Virtually all universities offer programs, seminars, courses, and other forms of short-term instruction that are related to the education and development of leaders in a democratic society with numerous voluntary associations and organizations. All such institutions are involved, therefore, in some form of leadership and/or administrative development. As a result of long-term and indirect involvement in the formal preparation of public and civic leaders, universities have acquired a mission and role that often goes unrecognized: the education of national leaders who must serve effectively in an increasingly complex international and intercultural community.

In the formal preparation and inservice development of future leaders, more intensive consideration of technological, multinational, and intercultural issues is inevitable. Better educated business and civic leaders will be more sensitive to and appreciative of technological and cultural challenges because responsive leadership in international cooperation will be as important as more technologically proficient and sophisticated workforces. Unless such leaders are prepared and sustained by universities with international perspectives and experience, the quality and effectiveness of training and education will be left to dubious methods of instruction and development. For such reasons—the cooperation of universities, business corporations, and government agencies is crucial to the education of future leadership.

To meet their many challenges in educating managers, leaders, administrators, and officials, universities must accept more responsibility for the development of institutional leaders in higher education. Conventional beliefs and expectations that leadership will emerge from within universities or be recruited from other societal institutions are no longer warranted. Leaders with knowledge, competence, and experience must be educated, trained, and developed; their formal preparation should begin at an early stage of education,
and their inservice or continuing (professional and personal) development should include extensive and diverse opportunities to observe, study, and evaluate the effectiveness of other leaders in other situations and under different conditions. Many such opportunities currently exist in the form of internships, fellowships, summer institutes, and short-term seminars, workshops, and conferences—but the overall (and particular) effectiveness of short-term training is seldom evaluated systematically and objectively. Many observers believe that the assessment and/or evaluation of leadership development programs will be essential to their effectiveness in the future.

International Cooperation

The dramatic effectiveness of common purpose, leadership, technological innovation, and technical training displayed in the Persian Gulf War suggests to many observers that similar forms of multinational cooperation are needed in meeting the many challenges of technological and cultural change. The unexpected events that followed in the Soviet Union imply that social, political, and economic changes can occur almost as suddenly and as dramatically.

All things considered, the capabilities, talents, and expertise of contemporary universities are national resources that must be used more effectively in all facets of national life—and in all phases of international cooperation. If American, British, and Continental universities are to expand and enhance their missions for full participation in international cooperation, they must be willing to plan and develop more adaptive, more responsive organizational structures than they currently have. They would be wise to experiment with provisional administrative structures that encourage adaptive and innovative cooperation throughout the university’s various hierarchical and functional divisions.

The development of more effective organizational and administrative structures should be firmly tied to better methods and procedures for recruiting, developing, selecting, and assessing institutional leadership. The education, training, and preparation of a
new generation of administrative leaders has never been more important to the future of the university in western civilization. And if they hope to maintain any semblance of autonomy and self-direction, all universities must assume greater responsibility for the continuing professional development of their current administrative leaders. The effectiveness of both administrative and organizational structures is most evident in sociocultural settings where innovative structures and functions are encouraged—and where the rigidities of hierarchical organization can be attenuated.

In seeking ways in which they can contribute more effectively to international cooperation, American and European universities should experiment more freely with forms of inter-institutional cooperation that will lead to mutual benefits and advantages. They should observe and study more closely the effectiveness of the varied forms of administration and organization in American and European higher education. Inter-institutional cooperation should include more active, more extensive programs and activities that involve institutional leaders and professional staffs. The assessment of institutional effectiveness could provide an excellent basis for inter-cultural exchange in the form of comparative and/or intra-cultural studies by administrative teams. Various programs have been developed for the exchange of students and faculty; virtually none have been developed for administrative leaders.

In closing, it is well to emphasize that American and European universities have a common intellectual and cultural heritage that includes many common beliefs, interests and values. Theory and research in science and technology, intellectual freedom in inquiry and analysis, the importance of rationality in institutional organization and governance, the role of innovation and change in society and culture, and many commitments to humanistic learning are but a few of the values and beliefs that make American and European universities distinctive—and worthy of emulation. Whether or not a new academic ethic or institutional ethos is emerging in the contemporary university is a matter yet to be verified. With or without such changes, there is much in the common heritage of universities to conserve, extend, and enhance in meeting the many common challenges of the present and the future.
References


Europe. Magazine of the European Community, (Robert J. Guttman, Editor-in-Chief). Published by the Commission of the European Community ten times per year.


Foreign Affairs. (William G. Hyland, Editor). Published by the Council on Foreign Relations five times annually.


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