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ABSTRACT

The crucial role of the states in postsecondary education and the changing conditions in higher education are addressed. It is noted that the states constitute the largest single source of funding for higher education and have the largest investment in it, and historically and constitutionally are primarily responsible for education. Important trends are declining college enrollments and the need to develop new student clienteles, including older citizens, who may require major changes in curriculum, services, and modes of instruction. There is also public concern with what appears to be overproduction of highly educated manpower (undergraduate and graduate levels). Inflation and decreased funding for education are major concerns, along with the demand for greater accountability by the general public and state government. A more recent development of significance has been the creation of independent legislative or executive auditing agencies concerned with both fiscal audit and performance audit (linking expenditures to outcome or results). Another factor has been the tendency on the state level toward increased centralization not only in planning and coordination but in governance and structure of public higher education. Concern is expressed that the states are spending considerable amounts on postsecondary vocational education, sometimes in direct duplication of occupational programs in community colleges and even regional colleges. It is suggested that there is need for directness in communication between higher education and state government, including legislators, the chief executive, and their staff, along with a need for effective statewide and institutional planning and attention to outcomes. (SW)



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The New Game By Richard M. Millard

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Few if any reasonably sophisticated persons in higher or postsecondary education or in state government would deny that we have moved and are moving into a considerably different period in the relations of state government to higher and postsecondary education than in the past. The situation might be described as a new ball game in which the conditions, the playing field, and the rules have shifted, but not all the players have recognized the shift or discovered the new rules. The only thing wrong with the analogy is that the stakes are considerably higher than in most ball games, for what is involved is the direction, characteristics and role not just of postsecondary education in the states and country but of education in general for at least the first quarter of our third century. It is perhaps not surprising that not all of the players are aware of the new rules for one striking characteristic of the new game is that the rules themselves are in a constant state of transition. Some of the factors that have brought about the new game can rather easily be traced.

However, before attempting to identify some of these factors, it is well to recall how critical a role the states in fact play in postsecondary education. In spite of what frequently appears to be the center of attention the federal government receives in relation to higher education, it is the states where the basic action takes place and from whence the major funding comes. Thus, for example, the total income of institutions of higher education in 1974-75 amounted to about 36 billion dollars (\$35.9 billion), six times as much as in 1960. Of this 36 billion dollars approximately one-fifth (\$7.2 billion) came from tuition. More than one-half (\$18.4 billion) came from government and of this half, two-thirds came from the states with the other third from the federal government. Of the total income to public institutions amounting to \$24.2 billion, one-eighth (\$3 billion) came from tuition

and slightly more than two-thirds (\$15.8 billion) came from government. Of this two-thirds, two-thirds (\$10.7 billion) came from the states, one-fourth (\$3.7 billion) came from the federal government and just under one-twelfth (\$1.3 billion) came from local governments. While the amount of public funds going into private institutions is considerably less (\$2.5 out of \$11.7 billion), one-fifth (\$462 million) of the government funds for private institutions came from the states and this does not include indirect aid such as tax exemption. The states thus constitute the largest single source of funding for higher education in this country and have the largest investment in it.

This is not surprising since both constitutionally and historically, the primary responsibility for providing educational opportunities for citizens has rested with the states. It was the states that provided the major portion of the funding to enable higher education to meet the need for rapid expansion in the 1960's. During that decade enrollments increased 126 percent primarily at public institutions. Educational and general expenditures increased 207 percent. Over 400 new campuses were created by the states to meet the need. Today, the prospects for future enrollments are considerably different and yet the costs continue to escalate.

Looked at in this context, the question of dealing with state government particularly for public institutions has been and will continue to be of a somewhat different magnitude than that of dealing with the federal presence. Even for the private institutions, since it is the state that incorporates or charters them and authorizes them to operate, exempts them from taxes, and in 42 states provides them with direct or indirect financial aid, their relation to the states is considerably more than casual.

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There can be little question that working with the states for institutions, trustees, and boards of higher or postsecondary education has become considerably more complicated over the last two decades than ever before. Many of the factors that have brought about the new ball game, while they have their roots earlier, have developed during the current decade and now bring about or call for new relations, new expectations, and new forms of interaction between institutions and boards on the one hand and state government—legislative and executive—on the other. What I would like to do is highlight some of these trends and the impact they have had and are having on postsecondary educational systems and state government and then try to suggest some of their implications for the changed game and its rules.

The first of these obviously is the changing student situation. We have already noted the tremendous expansion in enrollments in the sixties, expansion that has continued at a lesser rate and somewhat unevenly in different types of institutions to the present and may continue to You are also aware of the demographic facts in relation to the traditional college age population the 18 to 24 year olds. This group will decrease in the eighties and there is little evidence that it will increase in the nineties. Even the Carnegie projections that the next decade of substantial growth will be from 2,000 to 2,010 is at best speculative.2 More specifically among the states represented at this conference or their neighbors all have experienced increases of 18 to 24 year olds from 1970 to 1976 ranging from 13.2 percent (Tennessee) to 23.3 percent (Texas). However, between 1976 and 1980, four of these states will experience declines ranging from 6 percent (Oklahoma) to 0.2 percent (Missouri) and all 10 states will experience further declines ranging from 2.8 percent (Louisiana) to 8.9 percent (Kansas) from 1980 to 1985. The average decline for the five years will be 5.8 percent, 1.7 percent above the national average.3

The predictions for future enrollment, while varying considerably depending upon the source, are not for further expansion but at best for holding about even assuming a shift in enrollment in most institutions to older students and at worst a radical decline. Added to the population change is the drop in number of high school graduates going on to college from 55 percent in 1968 to 48 percent in 1974 plus the fact that the proportion of high school graduates to total population instead of

continuing to increase as predicted in the sixties has not only levelled off but started to decline.

The colleges and universities are thus on the whole faced with prospects either of declining enrollments or developing new student clienteles. or more likely both at the same time. While there may indeed be a large group of older citizens at least potentially interested in further education, the assumption that they will compensate either for the declining 18 to 21 year olds or that they will, if they come, erigender the same or increasing levels of state support are at least open to question. It is reasonably clear that they will not come in large numbers simply by opening the doors of traditional institutions to older students. The institutions that have had most success in involving older students are those that have been willing to make major changes in curriculm, services, and modes of instruction and to take education to the students rather than expecting the students to come to education. Further, some governors and legislators have taken the position that working older students should be willing to pay more of the costs of their additional education.

Along with this is considerable state and national concern with what appears to be overproduction of highly educated manpower not only among persons with doctorates but of college graduates in general, many of whom appear to be unable to find employment commensurate with their educational backgrounds. Joseph Froomkin in a report just released concludes:

"The more detailed analysis of the employment patterns of college graduates and persons with some postsecondary education fills one with pessimism about their job prospect...It is safe to conclude...that by 1985 roughly a third of college graduates will be in positions which were hitherto held by persons with less education...If they do, some two-thirds of persons with some post-secondary education, but no degrees, could find themselves in occupations formerly filled with high school graduates." ⁴

Projections that less than 20 percent of the labor force need coliege degrees do not help and the "college, who needs it?" attitude is still growing and has had impact on both public and private funding sources including legislators. More than a few people at the state level argue that if additional public funds are to be spent for postsecondary education they should be invested in more clearly vocational and occupational areas rather than in general support for higher education.

To the student situation must be added the fiscal situation. Some of the private institutions were beginning to feel the pinch between inflation and escalating costs on the one hand and-restricted sources of income on the other as early as the midsixties. By the early seventies legislators in some states were becoming alarmed at increasing costs and demands for funds for public institutions. This was complicated by the growing credibility gap between the public including governors and legislators and higher education, a gap growing out of student unrest and what was and still is perceived, whether correctly or not, to be less than efficient management of higher educational institutions. Since then, with recession and depression, the situation has become progressively more difficult. State budgets have been trimmed. In a few cases appropriations for higher education have actually been decreased. In most states the rate of increase for higher education has been reduced. While many of the states had sizeable surpluses three or four years ago, these in most cases have been wiped out or reduced and a few states have moved to deficit spending. Many states. including all of the states in this area, are constitutionally prohibited from deficit spending. A number of states and systems have had mandatory cutbacks in higher education budgets including Wisconsin, Michigan, New Jersey, the City University of New York, and the Pennsylvania State Colleges. It is true that some of the states in this area have faired better due to energy and agricultural production, but the assumption that even in states with major revenue increases more funds are likely to go into higher education may be gratuitous.

The picture is obviously further complicated by the fact that costs have escalated in all other government service areas as well and higher education has lost its priority status. Given the higher priorities in welfare, health energy, conservation, and highways, the hard fact seems to be that even with an upturn in the economy a likelihood in most states of major new funds for higher education is not great. Added to these other higher priority areas is the growing competition for funds within education between elementarysecondary education and postsecondary education. In some states this is already acute. Even though enrollments are dropping in elementary-secondary more rapidly than higher education public concern with a return to the basics and reform in elementary-secondary education, continued concern with school district equalization, and increased costs relating to federal programs such as

the new handicapped legislation tend in many quarters to give elementary-secondary education a higher priority than postsecondary education.

As the funds have become tighter and the priority for higher education has dropped, a third factor has become progressively more important; that is, the demand on the part of state government government and the general public for greater accountability. This demand for increased accountability is also in part a byproduct of the period of student unrest and the credibility gap we mentioned earlier. Few people even within the higher education community would deny that institutions should in fact be accountable for the effective, even efficient, use of public funds and to a greater or lesser extent they always have been. The new emphasis upon accountability has, however, taken a number of different forms, some of which extend considerably beyond fiscal accounting for the use of funds. Among these have been development of management information systems, program budgeting, performance audit and program review. As the fiscal situation has tightened and decision making has become more difficult, institutions and state agencies as well as legislators have progressively come to recognize the need for more effective information systems and revisions in budgeting procedures. To some extent, working through organizations like the National Center for Higher Education Management Systems, the American Council on Education, and National Association of College and University Budget Officers, the institutions and state agencies have themselves taken the lead in developing instruments for more effective reporting and an alysis.

A more recent development with far reaching implications has been the creation of independent legislative or executive auditing agencies not unlike the federal Government Accounting Office concerned not only with fiscal audit but also with performance audit—linking expenditures to outcome or results. Some 14 states have developed such agencies and others have it under consideration. While these have not been established primarily to audit higher education, higher education or some component of it frequently has been a primary concern, for unlike other areas of public service, it usually is not tied to mandatory funding formulas. This has become a matter of concern to institutions and state agencies for the state-of-the-art of performance audit is not very far along and the question of criteria to be used in such audits is critical. Far too frequently the prime

criterion is efficiency rather than educational effectiveness. But further, if educational effectiveness is to be measured, serious question can be raised as to whether or not non-educational governmental agencies are equipped to do so and, if they do, whether this does not weaken the integrity of the academic process.

A fourth factor not unrelated to accountability and the fiscal situation has been the tendency on the state level towards increased centralization not only in planning and coordination but in governance and structure of public higher education.

Statewide coordinating and governing boards are not new. The oldest goes back to 1784. The Kentucky and Oklahoma coordinating agencies were established in 1934 and 1941 respectively. However, the major period of their growth has occurred since 1960. In contrast to 23 in 1960, if one includes two state planning commissions executively established, all states have some form of state postsecondary or higher education agency today. They vary in power, structure, and composition. Some 20 are consolidated governing boards, some for senior institutions only, some for all public institutions. Thirty are coordinating boards with responsibilities varying from submitting consolidated budgets and review and approval of new and existing programs to boards with advisory planning responsibilities only. Many were created to provide for the orderly growth of public higher education and a number of them have responsibility as well for planning for independent as well as public higher education. They, like the institutions, are faced today with new issues growing out of fiscal stringency and possible contraction in higher education. Given to complexity of higher education such boards are not likely to go away and they do perform critically important functions in attempting to assure that the systems of postsecondary education in the states meet the public needs. They frequently are in a difficult position between the institutions and the executive and legislative branches of government. But they help insure that educational decisions are made within the educational community and, equally important, within the role and scope of institutions they help preserve the institutional independence essential to fulfilling their educational functions without direct political interference.

Today, due in part to fiscal stringency and desire for increased accountability and in part to reluctance of institutions and their boards to work cooperatively with such boards, the trend seems to be towards further centralization. There is a tendency for legislators and governors to move towards what might be considered a simplistic answer to complex problems-to want to find a single agency or even person who can be held accountable for all public higher education. In the late sixties and early seventies three states with coordinating agencies replaced these with consolidated governing boards. Within this year, six states considered such moves, three to the extent of introducing legislation. While the legislation did not pass in any of the three states, the issue is on continuing agendas. A series of states are currently reviewing structures and the probability that any of these will move towards decentralized control is not very high.

Of even greater concern, however, is what may be a developing trend to move responsibility for higher education decisions directly into the executive and/or legislative branches of state government. With the growth of executive and legislative staffs where institutions do not work effectively with coordinating agencies the tendency is for executive and/or legislative branches of government to take over directly the major function of budget review, audit control and decision making for higher or postsecondary education or to create a cabinet post of secretary of education, politically appointed, with these responsibilities. In one neighboring state this year, the joint budget committee of the legislature abolished the budget review functions of the coodinating board and reserved these wholly to itself. In some cases it has been proposed that the planning functions be taken over by a general state or governor's planning agency where higher education is considered only one among competing state agencies seeking funds. The message seems to be clear. If institutions are not willing to work cooperatively with appropriate state postsecondary education agencies or the agencies are not able to exert the leadership to develop effective planning and program review, the executive and legislative offices of state government are prepared to move in to create more centralized and responsive agencies or to take over the functions of coordination, decision making, and control themselves.

A fifth factor has been the recognition at the state level as well as federally that public higher education, while an essential part, is only one part of the postsecondary education universe. It does not even comprise all of the public postsecondary vocational education. And yet the states are spending considerable amounts of money on public

postsecondary vocational education, sometimes in direct duplication of occupational programs in community colleges and even regional colleges and universities. Public higher education obviously does not include independent higher education or proprietary education. State concern particularly for preserving independent higher education is clearly evidenced in the 42 states which make some form of direct or indirect aid available to them. It has become clear that in planning and in considering the postsecondary education resources of the state, the full range of post-secondary education in the state is going to have to be taken into account from now on.

In many states there clearly are other factors such as collective bargaining that have changed or are changing the state-institutional environment in the current decade and that call for new methods of state-postsecondary institution and system interaction. While collective bargaining has not made major inroads in the states represented in this conference except for lowa, yet, there is little reason to believe or assume it may not in the future, particulary as the financial situation becomes tighter. Where collective bargaining has made inroads it has not only changed intrainstitutional modes of operation but in some states, e.g. New York, has led to negotiations of faculty bargaining units not with local or system administrators but with the Office of Employee Relations in the Governor's Office. In Iowa it very nearly went this same route, but was finally delegated to the Office of the Board of Regents. The implications of this for direct state involvement in the daily affairs of compuses are somewhat staggering. However, on a nationwide basis the five factors of the changing student situation, the fiscal situation, emphasis upon accountability, increased centralization, and the expanded universe of postsecondary education constitute a sufficiently striking set of conditions to call for reevaluation of the whole business of working effectively with the elected state executive and legislative officials.

Generalizations about states, governors, or legislators or how to deal with them are extraordinarily dangerous and the exceptions will probabls outnumber the instances. But a few things can be noted. In the first place in most states higher education is not a high priority item. Even "education" governors and legislators have other frequently more pressing agendas. This does not mean that higher education is not a matter of concern. It is and it may be of more critical and intelligent concern than in the past. On the whole

the level of sophistication not only of governors and legislators but of their staffs has increased considerably in the last decade. Their questions tend to be much more incisive and the answers they expect-need to be much more concrete.

This means that some of the more traditional means of dealing with legislative and executive offices have at best limited effectiveness. Governors and legislators tend not to be interested simply in what a good thing higher education is. They want to know how? To whom? And for what? In the place of rhetoric they want facts-not raw data but analyzed information relevant to the point at issue. If there ever was a day in which a grateful governor and legislature received the requests of the presidents and the boards and left the money on the stump, it is clearly gone. Today, legislators and governors want a clear substantiation of need and then evidence that the funds appropriated to meet the need are spent for the purposes appropriated with indications of what has happened as a result.

While many legislators are not adverse to having tickets on the 50-yard line, they are far less likely to take them as reasons for increasing the institutions' or the systems' appropriations than in the past. Although some legislators will aid and abet end runs by institutions in their districts around a coordinating board c a governor's budget recommendations or the recommendations of other institutions in the system, they tend to have somewhat longer memories than in the past and to reflect this when moves to centralize arise which will protect them against such pressures. They are far less content than in the past to leave all information gathering and discussion of issues to formal hearings and prefer to be informed and consulted on a more continuing basis, particularly on critical issues. A number of them have developed their own information gathering and analysis staffs. Many of them are deeply concerned about the conflicting priorities for resources within the state and would like to see some evidence that educators are at least aware of these and in their planning take them into account. In relation to higher education specifically, they are looking for realistic analyses of needs and reasonable consideration of effective utilization of the full postsecondary education resources of the state to meet these needs. They no longer buy the assumption that any institution could or should be all things to all people and they are concerned about needless duplication but will listen to effective arguments for new programs to meet new needs.



Given the changed conditions and the partially changing interests and concerns of executives and legislators, what oo these imply in relation to changing and means of working with legislative and executive branches of state governement? What are the rules of the new game? It seems to me that at least some of the implications are rather clear and have already been indicated in the discussion of gubernatorial and legislative expectations. Perhaps the first implication and rule is the need for development of a directness and candor in dealing with the state political community that has not always characterized the higher education community in the past. This does not mean washing dirty linen in public but it does mean realistic assessment of needs in relation to goals and functions and developing indices of how or in what ways these goals and functions are being realized. It involves willingness to supply relevant information, developing appropriate information systems which will in fact produce the relevant information. It means using the budgeting process not as a means of obfuscation as has been done by some institutions in the past, nor as a shopping list of everything that would therorectically be desireable, but as an instrument to build the case for reasonable support. It is essential that an atmosphere of mutal trust be developed.

Second is the desirability of strengthening a continuous means of communication and consultation not only with the executive and his staff but with key members of the legislature and their staffs. Formal hearings are not adequate to explore the complex relations between states and post-secondary education. By the nature of the case they frequently tend to be adversarial in character. Through more continuous and informal discussions not only can the issues be more clearly identified but their ramifications explored.

Third, given the fiscal situation and the projected student situation, effective planning on a statewide basis as well as institutionally, including planning for possible retrenchment, becomes essential if we are to avoid the kind of cut throat competition not only between public and private institutions but among public institutions which can only be destructive and which neither state government nor the general public will support. This does involve setting goals and priorities, careful determination of role and scope, exploring means of inter-institutional cooperation, and doing so in the light of a thorough analysis of the postsecondary educational needs and resources of the state.

Further, this is the kind of task that cannot be performed by institutions separately. It requires cooperation, support and leadership by an effective state higher education coordinating or governing agency and not one—Mr. Kerr to the contrary—with advisory functions only. It must have at least the power, working with the institutions, to implement the planning process. Further, the political community not only should be kept informed but its advice sought in the process.

The fiscal situation already has called for retrenchment in some states and institutions and before they are through may well do so in others. In some cases this has taken the form of actual cutbacks, in others reduced increases. The initial reactions by some state agencies and institutions has been across the board cuts. As a temporary measure this may do, but if retrenchment is of longer duration more basic issues have to be faced, priorities established, effective means of review and decision making developed in which the institutions and their faculties need at least to be kept informed and hopefully fully involved. Planning for retrenchment is far more difficult than planning for expansion. Even if retrenchment has not taken place in your state at least standby plans thoroughly understood by the institutions should now be developed. Otherwise, if retrenchment becomes necessary, the impact on system morale plus administrative and governance confusion in a crisis approach are likely to take a heavy toll. Beforehand and not in the crisis is when criteria for consolidation and even elimination of what may have been considered critical programs or services need to be developed. If this is done, the end result may be leaner but strengthened operation as a result of the crisis rather than upheaval, even disaster.

Fourth, while neither the higher education community nor the board of higher education can be expected to determine the overall priorities in the state, they at least should be aware of these and through intergovernmental cooperation help contribute to their solutions. This does involve the development of a political sensitivity which has not always characterized the higher education community or some state higher education agencies in the past.

Fifth, it is critically important that the higher education community and particularly the state higher or postsecondary education agency be alert to concern with outcomes and performance audit

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and work to insure that educational effectiveness as well as fiscal efficiency be taken into account. This at least requires cooperative exploration of the issues with the accounting agency. It may require, as in Wisconsin, legislative clarification of responsibility in relation to keeping judgments of academic effectiveness within the higher educational community. Vithin institutions as well as on a statewide basis provisions for more effective program review may need to be developed if only to insure that where retrenchment is necessary cuts are made in terms of priorities to preserve quality.

Finally, we need to recognize clearly that we are in the era of postsecondary education and that while states have a primary obligation to their public institutions, all of the institutions of the state are part of its total postsecondary education resources. We may well be moving into a period in which some institutions, both public and private, will disappear. Our concern should be that in the process we do not lose the diversity essential to meeting the needs of citizens for a variety of educational opportunities commensurate with their interests and needs and extending from skill preparation to graduate education and lifelong learning. This does call not only for planning and

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awareness but for cooperation among all types of institutions in fulfilling their diverse educational functions.

The game has changed. The new rules are still evolving. There is little question but that the states as in the past will continue to be the major sources of support for postsecondary and higher education in this country. But the conditions are likely to be considerably more demanding from the standpoint of making an effective case that the postsecondary and higher educational institutions are meeting continuing and changing needs, that they are utilizing their resources effectively, and that the results of so doing can be not necessarily quantified, but documented. We are moving into what may be a more difficult period. But if the state higher education agencies working together with the institutions are willing to face the issues of priorities and work constructively with both the legislative and executive branches of state government, while there will be problems, they will not be insuperable and the end result is likely to be a leaner but healthier diverse system of postsecondary education in each state. To accomplish this, effectively working with the governor and legislature, establishing a community of understanding and reinforcement are essential-in fact are essential to survival.



^{1.} American Council on Education, A Fact Book on Higher Education, First Issue, 1976, Washington, pp. 76.60 and 76.61.

^{2.} Carnegie Foundation for the Advancement of Teaching, The States and Higher Education, Josey-Bass, San Francisco, 1976, p. 7. 3. American Council on Education, A Fact Book on Higher Education, First Issue, 1976, Washington, pp. 76.18 and 76.19.

American Council on Education, A Fact Book on Higher Education, First Issue, 1976, Washington, pp. 76.18 and 76.19.
 Froomkin, Joseph, Supply and Demand for Persons with Postsecondary Education. EPRC for Higher Education and Society.