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# EDITORIAL

## The American Research University

A distinguished group of scholars has contributed thoughtful essays to an issue of *Daedalus* (vol. 122, no. 4, Fall 1993) devoted to the American research university. They have discussed many aspects of the changing circumstances in which these universities now function. The institutions face increased criticism and additional demands for public service and accountability at a time when costs of research have mounted and resources are limited. Especially affected are faculties in science and engineering. For decades they enjoyed international acclaim for their many accomplishments. The drastic change in the climate of the times has led them to have rising anxieties about the future. Their worries include harsh competition for funding, uncertain job security, and questions about how to participate effectively in the current vogue of national economic competitiveness.

All the essays in the issue of *Daedalus* are provocative and informative. One by Donald Kennedy, president emeritus of Stanford, is especially so. He is now in position to be coldly analytical about problems faced by university presidents attempting to respond to the new order of things.

During the past decades an enormous expansion in knowledge has been made. Obviously, universities cannot teach everything. What should they teach? Who decides? Highly qualified scientists have solved the easy problems. The potential for accomplishment in some fields has apparently been essentially exhausted. An example not cited by Kennedy is that of discovering the stable isotopes of the elements. That work is done. Frontiers of basic research are changing. Can faculty structure and activities evolve correspondingly? Kennedy described factors that lead to a virtual stasis. He pointed to a vast difference between universities and other organizations. These latter can bring in new people to replace others. They have the ability to make people accountable to central authority for their performance. At the universities, the institution of tenure prohibits rapid change. The abolition of mandatory retirement has added to a paralysis. Kennedy also pointed to the traditions of academic freedom and peer review that concentrate the power of appointment with local faculties. Typical faculty members are highly loyal to other members of their discipline. They belong to invisible colleges that exist outside their institution. They also sense that the vigorous survival of their own discipline is a form of insurance for their own future well-being. Narrow-minded loyalty to a discipline also interferes with the conduct of interdisciplinary studies and research. Many of the most important opportunities for significant discoveries lie in such fields. However, the loyalists take the view that a course that devotes some time to another discipline cannot be as rigorous as one totally in a single department.

Kennedy raised the question, "How can universities keep what matters most and discard other things that matter less?" It is apparent that a university president or provost is up against enormous inertia and an unbalanced power situation in dealing with the faculty. At other universities—including Princeton, University of California at Berkeley, Columbia, and Yale—when a threat to eliminate a department was made, an enormous furor resulted, including major stories in the national news.

Kennedy told of efforts to involve faculty in making hard choices at Stanford. The occasion was the necessity to make harsh budget cuts. He asked a distinguished faculty group composed of members from many fields to advise him. They recognized that across-the-board cuts were not an optimum procedure. However, they could not develop a consensus on which programs should be axed. When individual members of the faculty committee spoke privately to Kennedy, they suggested deletion of disciplines far removed from their own.

Kennedy's experience with visiting committees was not better. Their efforts seldom led to tough-minded priority-setting. They tended to recommend more resources for what they were convinced was an area of unique importance—"in the words of one overenthusiastic colleague 'a virgin field, pregnant with possibilities.'"

Thus the current picture presented by Kennedy is one of inability of an institution to make the tough decisions necessary to capitalize on evolving opportunities. He offered the opinion that the crisis for universities will deepen. Then ultimately in some universities a necessary coalition of the faculty and central administration will occur. He stated, "The institutions that make the hard choices, that are willing to redefine what is fundamentally important, will eventually distance themselves from the rest...."

Philip H. Abelson