

HIGHER LEARNING

DEREK BOK

“A highly readable, often entertaining,
and important book.”

—*Philadelphia Inquirer*

Higher Learning

Derek Bok

Harvard University Press
Cambridge, Massachusetts
and London, England

Copyright © 1986 by the President and Fellows of Harvard College
All rights reserved
Printed in the United States of America
10 9 8 7 6 5

Library of Congress Cataloging-in-Publication Data
Bok, Derek Curtis.

Higher learning.

Includes index.

1. Education, Higher—United States. 2. Universities
and colleges—United States. 3. Professional education—
United States. I. Title.

LA227.3.B63 1986 378.73 86-9876

ISBN 0-674-39175-6 (alk. paper) (cloth)

ISBN 0-674-39176-4 (paper)

Higher Learning

To Sissela

Acknowledgments

Many friends helped me immeasurably by reading drafts of all or part of this book. Rather than specify the contributions made by each, let me simply express my great appreciation for the advice and criticism I have received from Burton Dreben, Henry Rosovsky, Roland Christensen, Dean Whitla, Burton Clark, and Graham Allison. Since my job makes it difficult to spend hours in the library, I have also benefited greatly from the able research assistance provided me by several people: William Neumann on undergraduate education and continuing education, George Baker III on professional education, and Barbara Graham, Joan Gulovsen, and Eileen Jay on the applications of technology to teaching. All of these provided me not only with research assistance but with the opportunity for much valuable discussion about the subjects on which they worked.

It would be impossible to express in words the thanks I owe to my loyal office colleagues, Julie Boruvka, Florence Gaylin, Elizabeth Keul, Priscilla Kinnear, and Marilyn Schmalenberger, for putting up with my endless drafts and redrafts. Above all, I am grateful to my wife, Sissela, who has read each chapter more than once and given me invaluable advice throughout.

Higher Learning

Contents

Introduction	1
1. The American System of Higher Education	8
2. Undergraduate Education	35
3. Professional Schools	73
4. New Developments	114
5. Prospects for Change	158
Index	203

Introduction

When I began teaching at Harvard Law School more than a quarter of a century ago, I found much that exceeded my expectations. No group of students could have been more supportive or more patient with my early mistakes than the small venturesome band that chose to study Labor Law with me at nine o'clock on Friday and Saturday mornings. No colleagues could have been more welcoming than the same senior professors who had seemed so forbidding to me as a student only a few years before.

Amid these unexpected pleasures, I encountered only a single disappointment. One of my reasons for choosing to teach rather than practice law was the thought of mingling with scholars from a wide variety of fields. I had looked forward to spirited lunches at the Faculty Club with archaeologists fresh from digging in exotic lands and astronomers brimming with theories about life on other planets. Alas, nothing could have been further from the truth. The Law School, filled as it was with friendly colleagues, seemed cut off from the rest of the University as if by a vast moat.

For a brief moment, I thought that I had discovered a bridge to Harvard Yard when a young historian asked me to join a group of his colleagues at a weekly poker game in a smoke-filled basement of one of the undergraduate residence halls. After two disastrous sessions, however, I reluctantly concluded that I could

2 *Introduction*

no longer afford to communicate with the rest of the University via the gaming table. Other opportunities to widen my horizons failed to materialize, for one reason or another. And so my fondest hopes for an academic career went unfulfilled.

At that time, I had not yet discovered the philosopher's wry admonition: Take care in your youth when you choose your ambitions, for in your middle years you may achieve them. As I yearned for more contact with lively minds and intellectual activities around the University, I never imagined the scale on which my hopes would one day be realized.

Many years later, I learned that trying to keep up with everything going on at Harvard was an impossible undertaking. Modern universities are immensely complex institutions. Indeed, Clark Kerr has argued that they should be called multiversities because they are responsible for such a dizzying variety of programs and activities. Kerr undoubtedly has a point. Within the past few years, colleagues of mine at Harvard have helped to write a tax code for Indonesia, created a new program for educating medical students, conducted seminars for recently elected members of Congress, won a Nobel prize for research conducted in Geneva, taught physics to high school students in the surrounding community, briefed several heads of state on domestic and international issues, designed major construction projects in Jerusalem, written hundreds of books, given thousands of lectures, and taught tens of thousands of students.

It is the last of these activities, the teaching of students, that is the subject of this book.¹ How well do our universities edu-

1. Some readers may wonder why anyone would write about universities without discussing research. Since scholarship and scientific discovery are the most distinctive contributions of our major universities, writing a book without mentioning what goes on in the library or the laboratory may seem odd, to say the least. Yet the fact is that almost no one can write comprehensively about research. The issues that really matter are intellectual questions concerning the shifting interests, problems, and methods that mark the process of scholarly investigation. Such issues differ profoundly from one field to another and are best understood by active scientists and scholars. That is why authors who write in general terms on the state of university research so often discuss problems of secondary importance,

cate their students, and how could they do better? The importance of the subject seems obvious. Research universities enroll a disproportionate share of the most intellectually gifted high school graduates. They attract virtually all of the most talented students entering professional schools. These young people are a vital national resource, and what they learn in universities is important to us all.

Or is it? College presidents are forever making claims about the importance of education, and they are rarely contradicted in public. Yet the agreement may not be as strong as one might think. Disputing the importance of education may seem comparable to criticizing motherhood and family. But many people believe that native talent is more important than what a student learns in class; that things not learned as a student can be learned later on at one's job or on one's own; that beyond giving an adequate level of preparation, the principal function of universities is to recruit and classify talent so that it can be identified more easily by graduate and professional schools and, ultimately, by employers. These beliefs reveal why corporate recruiters inquire very little into the quality of management programs but take care to visit the universities that attract the brightest students. They help explain why law teachers spend many hours grading exams and ranking their students yet provide them with little feedback that will help them learn to do better in the future. They may even suggest why selective colleges talk so much about the SAT scores and other intellectual accomplishments of their entering classes but say so little about how much these students actually learn after they arrive.

In fact, no one knows a great deal about how much students learn in colleges and universities, and it is very difficult to find out. Cognitive psychologists are exploring the question, and

such as the adequacy of government support, the obsolescence of equipment, or the need to attract abler students into graduate schools. These are significant topics, to be sure, but they hardly go to the heart of the research enterprise. To write about the deeper questions of research across a wide spectrum of fields may be a task beyond the capacities of almost any author.

4 Introduction

some of their recent research is encouraging. For example, according to Kurt Fischer and Sheryl Kenny:

Although environmental support is required for optimal functioning at any developmental level, it seems to be especially important at the highest levels of abstraction. One of the most important roles of educational institutions may well be to provide the support that is necessary for functioning at high levels of abstraction. Indeed, people may be almost incapable of routinely using high-level skills without supportive environments like those provided by educational institutions such as high schools and colleges.²

Although these findings are intriguing, much more work remains to be done, and the full effects of a university education may not be known for a very long time to come. Even so, our uncertainty on this score hardly means that we should be less committed to trying to make our educational programs better. As with many issues of policy, our views about the importance of education must be based in large part on judgments rather than proven facts, judgments that depend on a prudent assessment of the stakes involved.

There are several reasons for placing a high value on education. One of them is that the problems arising in many forms of work seem to grow steadily more difficult and to require greater amounts of knowledge for their resolution. In the professions, for example, doctors have to master increasingly sophisticated decisionmaking methods and cope with difficult problems of costs, ethics, and patient psychology that were largely ignored a generation ago. Business executives confront mounting competition from abroad, more intricate questions of science and technology in their product lines and production methods, increasing pressures from government and community to help in addressing a variety of social problems. Public officials face greater

2. Kurt W. Fischer and Sheryl L. Kenny, "Environmental Conditions for Discontinuities in the Development of Abstractions," in R. Minas and Karen Kitchner, eds., *Social-Cognitive Development in Early Adulthood* (New York: Praeger, in press).

challenges now that the agencies they administer have become so huge and the problems that government tries to solve so complex. As the work required in many walks of life grows steadily more demanding, the costs of being poorly prepared must presumably rise as well.

Another phenomenon that makes the world seem more complicated is the rapid increase in the sheer amount of information to be learned. Knowing that this growth will surely continue, we can no longer be content with teaching students to remember a fixed body of knowledge; instead, we must help them to master techniques of problem-solving and habits of continuous learning. This shift makes the quality of a university education more important, not less. By and large, it is much easier to absorb a body of knowledge on one's own than it is to learn to solve problems or to master new modes of thought. Hence, formal instruction is likely to become more important and the consequences of inadequate education more serious than they have been in the past.

Increasing competition from abroad—economic, political, and military—also raises society's stake in maintaining a high quality of education. Our labor force is highly paid and our supply of raw materials no longer exceptional. More and more, therefore, the United States will have to live by its wits, prospering or declining according to the capacity of its people to develop new ideas, to work with sophisticated technology, to create new products and imaginative new ways of solving problems. Of all our national assets, a trained intelligence and a capacity for innovation and discovery seem destined to be the most important. Since universities have the principal responsibility in our society for helping to develop people who possess these capabilities, the quality of the education they offer is likely to take on greater and greater importance.

America's stake in education is also closely linked to the nature of our political system. In a democracy like ours, the quality of government depends on an informed electorate. In an era when the issues facing the society have become so difficult and

6 *Introduction*

numerous and the government has assumed such unprecedented responsibilities at home and abroad, the risks arising from a poorly educated population must be greater than ever before.

Beyond these practical considerations lies another reason that is no less compelling. Universities should do their best to improve the quality of their programs not only because students and society have to cope with pressing problems but also because education is important for its own sake. Professors, deans, presidents have all chosen to devote their lives to educating others. They have made this commitment because of their respect for knowledge and their desire to learn. These very reasons should impel them to do their best for their students, whether or not the practical results can ever be proven. As professionals, they owe that effort to those who pay the salaries that enable them to enjoy a life of learning. As intellectuals, they should be the first to have faith in the importance of education—not a blind faith, to be sure, nor simply a faith based on prudent calculation, but the faith Dean Inge has described as “a choice of the nobler hypothesis.” If scholars must choose whether it matters if young people learn to grasp important ideas, or to appreciate great works of literature, or to reason more precisely, it would surely be ignoble to respond with anything less than a vigorous affirmation.

This is a particularly interesting time to consider the state of education in our universities, for the past ten or fifteen years have been marked by much innovation. Faculties have launched a wide variety of imaginative ventures, including experimental curricula, novel methods of instruction, and efforts to reach new groups of students. The literature on higher education teems with discussions of self-paced learning, computer-assisted instruction, core curricula, and nontraditional programs for older students. The next decade or two will determine which of these experiments will take root and which will wither away. The choices made are bound to have an effect on the processes of teaching and learning for generations to come.

Many of the pages that follow will be devoted to exploring

how universities make these choices and how they change the methods and content of their teaching in response to new opportunities and needs in the outside world. This inquiry offers a useful perspective from which to study American universities, for it is the constant pressure to respond to society's needs that most distinguishes our system of higher education from its counterparts abroad. By examining responses to past demands, we can understand how our universities became what they are. By perceiving new demands, we can anticipate how they will develop in the future.

In describing how universities evolve, I point out that they are driven to an extent unique in the industrialized world by the stimulus of competition. At the same time, the nature and results of this rivalry are quite different in education than in other fields of human endeavor. To illuminate these differences and their consequences, I consider a range of programs, starting with the core of the university—the liberal arts college—and then shifting to the professional schools, especially schools of law, business, and medicine. Thereafter, I look at some important changes currently taking place in higher education: the increasing use of advanced technology in teaching, the effort to develop better ways of preparing students for public service, and the growing interest in midcareer education for practitioners in many different professions. At the end of the book, I draw some conclusions about the performance of our universities—and suggest how they can develop in the future to make greater contributions to students and to society as a whole.

The American System of Higher Education

Just after I was appointed to my present position, a Harvard alumnus asked me to spend a bit of time talking to an elderly gentleman of his acquaintance. Apparently this gentleman had acquired a reputation in business circles for being unusually wise in the ways of large organizations and how they could be governed effectively. By now, the details of our conversation have grown dim in my mind—except for one unforgettable observation. “Remember this,” said my venerable adviser: “your most creative ideas about the future of Harvard will come in the next few months, before you take office and get embroiled in your official duties.”

What a disturbing thought! Before our conversation, I had supposed that I could spend a happy interlude getting to know members of the faculty, poking about in Harvard’s many professional schools, making a few key appointments to strengthen my staff. Suddenly, it seemed, I had to have ideas—big ideas—else I would be forced to settle for an undistinguished tenure trying to hold things together without hope of making significant improvements.

As each day came to a close, I noted with a twinge of regret that another opportunity had come and gone with nothing creative to show for it. I began to wonder what my predecessors had done to take advantage of this crucial period. Looking into the matter, I found that Charles W. Eliot had lost his wife just

before being chosen president. According to his biographer, Eliot finished out the term teaching chemistry at MIT and spent the summer at his home in Chestnut Hill laboring over his inaugural address. "Work was his refuge from sorrow and he worked day and night."¹ On reflection, this example seemed a bit austere for my tastes.

Eliot's successor, A. Lawrence Lowell, had already formed most of his ideas before being offered the presidency as a result of years of opposing Mr. Eliot's policies in faculty meetings. He too continued teaching after his appointment was approved. Apparently the classroom gave him a welcome forum in which to dispel groundless rumors appearing in the local press. "I am not going to instruct the Faculty to abolish football," he declared, "or to have the students study between meals."² So great was Lowell's enthusiasm for his new duties that he took over on May 19 instead of waiting for the fall term to begin. Again, this was not precisely the example I was looking for.

The preparation of James Bryant Conant was a different matter altogether. For Conant did something quite unexpected. Having earlier studied for a time in Germany, he elected to return to Europe for several weeks to wander about among British universities observing, talking, looking for good ideas.

Mr. Conant's example was by far the most intriguing I had discovered. And yet, reflecting on his experience, I realized how much must have changed in the intervening forty years. Despite my affection for Europe—where I had traveled while in college, studied as a Fulbright scholar, and met and married my wife—I had no inclination at all to go there now. Certainly, the trip would have been enjoyable. I would have encountered many scholars of exceptional ability and enjoyed many stimulating conversations. I simply had no sense that such a journey would bring me the ideas I needed.

1. Henry James, *Charles W. Eliot, President of Harvard University, 1869–1909*, 2 vols. (Boston: Houghton Mifflin, 1930), vol. 1, p. 224.

2. Henry Aaron Yeomans, *Abbott Lawrence Lowell, 1856–1943* (Cambridge, Mass.: Harvard University Press, 1948), p. 102.