Education deals in controversy; it cannot escape it. One function of education, perhaps its most important, is to lead the student toward a balanced, mature, and thoughtful awareness of controversy and to provide him with the tools with which to judge it. Indeed some educators, perhaps extremists, insist that unless judgment is exercised, education is not taking place, but only a skill, technique, or method being imparted. But these same educators, sometimes contemptuous of professional and technical education, overlook a second and most obvious function of education: to rationalize human knowledge and human relations.

A subject is rationalized when it is removed from the realm of conflict and uncertainty, from the realm of controversy, and reduced to a finite scientific or technical body of knowledge which can be transmitted from generation to generation, altered, expanded, or contracted, without concern for the barriers of nationalism, religion, morals, or whim. No skill or no science, I suppose, will ever be removed entirely from controversy; yet I find it reassuring, for example, that medicine in most of the world has been rationalized beyond the point of incantations and entrail reading.

The educator should avoid two rather distinct pitfalls in dealing with controversy in education. To ignore controversy, to skirt gingerly around its edges, is to rob education of its most fundamental purpose—the development of judgment. On the other hand, to engage in controversy for its own sake is to ride roughshod over another goal of education, the rationalization of knowledge. An educator must, therefore, face controversy, and if necessary, take sides. What does it mean to “take sides” as an educator?

A common assumption made among both educators and laymen alike is that we must “wait until all the facts are in” before making a judgment. The facts may never all be in. We think of Darwin as a man of research, but he became an educator when he publicly issued his famed hypotheses on the origin of the species, hypotheses which took fully into account but nevertheless exceeded the data which he had at hand. In short, he took sides, as did Einstein, Copernicus, Mendel, Galileo, or—to take someone from another walk of life—Abraham Lincoln. Few of us will ever become grand educators in the tradition
of Galileo or Lincoln, but more of us can assume the fundamental responsibility inherent in our profession.

A broad area of methodological controversy has opened up in the last decade in my own field of political science. The behaviorist approach has been a fresh breeze to political science, and has already swept aside a vast pile of intellectual rubble regarding the behavior of human beings, some of which dates from the Socratic period, and most of which has hindered the progress of social studies. However, the political scientist who is interested in goals—in value or policy—is often held in withering contempt by the monastic behaviorist because he has "exceeded his data."

The rejoinder is, of course, "hell, yes, he's exceeded his data." He does so every time he casts a vote, every time he advises a student, every time he forms a moral or political judgment—in fact, every time he makes any commitment of faith or honor or obedience to the world in which he lives. I know of no man and woman who have so rationalized their marriage that all controversy has been removed. I suspect that if this ever occurred, the bond would be broken for sheer boredom.

Does the introduction or use of controversy in education have any concrete limits? I think it does, but these limits may not be those which are commonly accepted. Because most of us feel more at home in the area of scientific controversy than in political or philosophical controversy, the general tendency is to admit the former but not the latter into the process of education. No attitude could be more mistaken. Scientific controversy is political controversy because it has, now or ultimately, social and political ramifications.

Two questions, it seems to me, must be asked regarding the admission of controversy into education: (1) Is the teacher committed first of all to the rational, intellectual development of his student and only secondly to his scientific or political dogma? (2) Have the teacher and the institution which he represents taken care to identify their position clearly, publicly, and with a sense of humor? If the answer to both of these questions is yes, controversy has been put in its proper educational perspective, and made into an effective tool for learning.

I believe I can anticipate your reaction to what I have said thus far. Don't ask me, in the name of education, to become an active Democrat or Republican, or to become a public relations man for the Chamber of Commerce, the National Farmers Union, Boeing Aircraft, or Orville Freeman. I have a state legislature, a board of trustees, a board of agriculture, a college dean, a station director, or someone else to deal with in my educational career who does not accept a word of what
you are saying. That is education enough! But is it not possible to educate ourselves in the processes of controversy, without getting involved in the resolution of controversy?

It seems to me that the difficulty in both agriculture and agricultural education in the United States today stems from the evident success of our scientific education but the dismal failure of our political education. The rationalization of agricultural production in the United States is one of the scientific miracles of this century, due in part to you and your predecessors in the land-grant colleges and experiment stations, and one which has been communicated behind the iron curtain without regard to language or politics. At the same time, however, you have not yet learned how to rationalize agricultural distribution in the political community. You are working on it—perhaps you will solve it—but at the moment it is inextricably bound to the question of values, which is the muddy realm of politics and controversy. It is not surprising that the three general farm organizations are, like the AMA, the AFL-CIO, the Chamber of Commerce, and the American Legion, fundamentally political agencies, despite their secondary characteristics as social, fraternal, insurance, and marketing groups. None of us have failed to notice that James Patton and Charles Shuman tend to look distracted when they receive advice from economists, statisticians, and political scientists on the resolution of the "farm problem." They are wondering instead what Chairman Cooley, of the House Agriculture Committee, has been thinking and doing.

A quiet revolution is currently taking place in some areas of professional and technical education in the United States. Bit by bit the old wall between the technical and administrative sciences, on the one hand, and the policy sciences on the other, is breaking down. The common ground between them is that of process, specifically, the policy-making process. This revolution is particularly evident in schools of public administration and public and private management, i.e., forestry, range management, conservation, watershed management, etc. It is to a lesser degree evident in home economics, engineering, law, health administration, school administration, etc. What is happening is that substantial doses of study in public law and the political and administrative processes are being introduced at the undergraduate level, while degree and in-service training programs are rapidly being organized at the graduate level. To the best of my knowledge, however, our colleges of agriculture have given very little effort to integrating policy studies, that is, the processes of controversy, into agricultural or extension curricula.

Let me review the steps that are being taken in other professional schools in conjunction with the policy sciences.
1. The core curriculum in the administrative process has been rather widely adopted. Here the student is introduced, not to the details of personnel or financial administration, but to the broad questions of executive responsibility, administrative organization, administrative access, administrative rule-making, and other matters which may be of direct concern to the administrator himself or to the private citizen faced with a massive and mysterious bureaucracy.

2. Through the core curriculum in political processes, the student in professional schools is being introduced to the organization and function of political parties and pressure groups, to the legislative process, and other matters relating to policy formation.

3. Under sponsorship of both public and private foundations, in-service educational scholarships for professional personnel have come extensively into use.

4. Both graduate and undergraduate administrative internships have been widely adopted in the educational systems of many professional schools. Estimates are that almost 7,000 student interns, many of whom came from professional schools throughout the United States, were in various administrative offices of the United States government during the summer of 1962.

5. Graduate and undergraduate political internships have been less widely adopted, but are becoming increasingly important. Students from professional schools are sometimes placed in state legislatures, in the United States Congress, with professional interest groups both in Washington and in the state capitols, and even on rare occasions with political parties.

Whether any of these programs can be adapted for the purposes of agriculture and agricultural education I leave to you. It seems to me, however, that until agricultural education squarely faces the need to rationalize controversy in the whole of American agriculture, the disparity between agriculture as a technical science and agriculture as a humane science will forever remain. I am perfectly aware of your sensitivity to partisan involvement. But I am also quite aware of the high level of political and even partisan skills that are often developed by deans of colleges of agriculture, by experiment station directors, and by extension directors. They have been forced to develop these skills, whether they enjoy politics or not, because—to start at the very lowest level of politics—agricultural college appropriations are themselves a political problem.
PART IV

State and Local Taxation Policies