Public policy for agriculture and natural resources must change as farming and the use of resources change, but policy also changes to reflect new understandings. The new understandings that will shape future agricultural policy may not come from food producers or agricultural scientists, and may not assume that expanding production is the primary goal. Undoubtedly, the knowledge, experience, and perceptions of consumer advocates, environmentalists, and minority groups will become more influential in the future. Consequently, public policy educators are bound, by ethics and concern for the common good, to balance the diversity of viewpoints involved in policy formation. The old idea that technical models and data are sufficient for policy analysis must be broadened to include goals and viewpoints held by diverse sectors of the population. The public choice model of policy analysis adapts industrial organization theory into a framework for public choice by analyzing policies in terms of situation, structure, concept, and performance (SSCP). Situation refers to unmodifiable facts of nature. Structure refers to the rights, resources, and other rules that, with the situation, determine the opportunity sets of interacting parties. Conduct is the self-interest that leads people to satisfy their preferences, or end states. Performance is evaluation of end states (outcomes or consequences). The ethics-oriented adaptation of SSCP facilitates both better policy and better accommodation of multiple interests by making opposing viewpoints easier to understand. It uses technical data to formulate consequence-predicting models where appropriate, but also draws on longstanding traditions of legal, historical, and philosophical analysis in formulating appeals to rights and virtue. Contains nine references. (JAT)
BALANCE, DIVERSITY AND ETHICS IN PUBLIC POLICY EDUCATION

Paul B. Thompson
Texas A&M University

Public policy for agriculture and natural resources needs to change when farming, ranching and the use of natural resources themselves change, but policy also changes to reflect new understandings. The new understandings made possible by agricultural science were the source of changes in farming practice throughout the first two-thirds of the twentieth century. Throughout that period, policies to support the development and adoption of new agricultural technology were supplemented by policies designed to ameliorate some of the harsh social consequences associated with those technological advances. Perhaps these ameliorative policies did more harm than good, but that is not at issue here. Debating the success or failure of conventional commodity policies will soon be an academic exercise for economic historians. There is also a lesson to be learned in the fact that yesterday's policy supplements and ameliorative fixes came to be identified as the primary elements of agricultural policy for several decades, but that, too, is a subject for history.

The questions for the present and the future must address the way recent and likely changes in our understanding of agriculture and natural resources will precipitate events in the next century. By “our understanding,” I mean the collective result of many individuals’ knowledge, experience and perception. While it is impossible to say which individuals will be decisive in forming that result, it is beyond dispute that the knowledge, experience and perception of consumer advocates, environmentalists, minorities and representatives of peoples from across the globe will be more influential in the future than in the past. The new understandings that will shape agriculture and policy will not come exclusively from producers, agricultural scientists and the food industry. The new understandings may not presume that expanding production is the primary goal, with unwanted side effects of expansion to be ameliorated by softening the blows. The new understandings will not be based on agricultural science and may not be based on science at all. It is for this reason that public policy educators face new challenges in balancing the diversity of interests and viewpoints involved with agriculture and natural resource policy.
Why Should Policy Educators Strive to Incorporate More Diverse Views?

Before taking up the challenge of new understandings, however, it is relevant to ask, “Why bother?” There are two basic reasons. One relates to ethics, the other to interests. The ethics answer is that democracy presupposes, and the U.S. Constitution and Bill of Rights guarantee, that every citizen is entitled to an opinion on any issue, and that they may attempt to influence the political process to achieve a result consistent with that opinion. Of course there are legal and ethical restrictions on the means of influence that may be employed. Bribery, extortion and blackmail are frowned upon, but even these restrictions are intended to promote free and uninhibited debate over policy options as the primary means for arriving at consensus on public policy, and for establishing the majority party’s rationale for policy choice when consensus is unavailable. While the ideal of public debate may be partially fulfilled on most occasions, and severely frustrated on some, it nevertheless establishes the presumptive norm for political decision making in a republic.

Educators who wish to further the cause of democracy are obliged to encourage public debate between opposing parties. They should do so by advising individuals and groups whose interests are likely to be affected by a policy change, and by faithfully representing the arguments, goals and viewpoints of those individuals and groups who adopt opposing positions. They may also encourage debate by analyzing and explaining the arguments that are advanced in public debate, thereby improving the clarity and quality of public deliberation (Campbell). This, in my view, is what balance and diversity in public policy amounts to. Diversity is presumed; representing the diversity of interests and values should be controversial only when democracy itself is challenged. While some have opposed the democratic ethic, surely this is one ethical tenet that may be taken for granted in the present context.

It is also in everyone’s interest that these new understandings be accurately reported and analyzed in research and education on agriculture and natural resource policy. New understandings might, after all, produce innovations that help producers, input suppliers, and the food industry better achieve their goals; but even if they do not, and even if the new viewpoints frustrate and delay the pursuit of traditional goals, it will be important to understand the new political culture of agriculture and natural resource policy. It is only common sense to recognize the value of accurate information about one’s potential antagonists. Yet individuals and groups within the agricultural sector have engaged in repeated and extended exercises in obfuscation on several key issues. They have repudiated those who would attempt truly representative public policy education, and have rejected opportunities for dialog with opposing interests. Understanding the sources and motivations of these tactics is one key to including more diversity in public policy education. Some of it will fulfill, but much of it is well-intentioned. The obscurantists may regard themselves as acting in agriculture’s interests, but the result has been self-deception and the persistence of a false, one-sided picture of the political and economic environment in which the fate of agriculture, natural resources and the food industry will be decided.

One egregious example of this self-destructive activity occurs with respect to animal welfare. Scientists, commodity groups and industry representatives have derided and mocked those who have sought to raise the political profile of this issue, or to promote research on welfare indicators and their measurement. Publications, speeches and informal communications have frightened producers with a caricature that portrays the animal advocate as a wiggled-out, ultra-liberal bent on replacing Christian values with anti-American socialist vegetarianism, and prepared to perform heinous and unspeakable acts in order to harm the reputation, property and person of unsuspecting family farmers. This picture is not, of course, a total fabrication. It is easy enough to find animal advocates who exhibit some of these characteristics, and some published tracts of the animal rights movement portray animal producers in barely more favorable terms. (In the interest of future harmony, documentation of names and citations on both sides of this controversy can be spared). Yet the middle ground here is obviously large and growing. We do not need surveys to recognize this trend. Anyone who visits urban centers such as New York, Vancouver, Chicago, Los Angeles or Houston has seen the gradual proliferation of restaurants advertising humanely raised animal foods on their menus. Judging from the style and price of these establishments, they are not frequented by young hippie Communists, and the prominence of beef, pork and veal among their entrees proves that they are not catering to vegetarians. Anyone who has traveled in Northern Europe knows that concern for the welfare of food animals is both authentic and broadly based. Anyone with school aged children must surely have observed the allure of vegetarian diets that fascinates many girls in their pre-teen years. So-called vegetarianism is itself a more complex phenomenon than is generally recognized, with many self-professed vegetarians allowing themselves regular and frequent consumption of animal products, including meat. The spectrum of attitudes on welfare and vegetarianism is broad and finely articulated. Why animal producers and the animal science community would wish to position themselves at one of the extreme ends of the spectrum, and at odds with the majority of their customers, defies rational explanation.

Let me underline the key point. I am not advocating animal welfare policies. I am not a vegetarian. I am not claiming that there is now or ever will be a large economic demand for so-called “humanely produced,” meats, eggs and other animal
products. I am not predicting that animal welfare concerns will be an important source of new understandings for agriculture and natural resource policy. I have brought up the issue to make the point that agricultural producers, researchers and public policy educators have promoted an understanding of the animal welfare debate that is patently false, and that precludes not only the formation of consensus policies, but also exploitation of such economic opportunities as do exist. It is the self-deception and isolation that I wish to emphasize, and to note that it can hardly be in the interests of agricultural producers to persist in it. Self-deception also occurs, though less dramatically, on issues relating to food safety, nutrition, environmental health, preservation of natural areas, protection of wildlife, and even rural development.

Do We Need a New Approach for Policy Education?

It is nevertheless possible to accept both a commitment to democratic participation in the political process and the idea that everyone’s interests would be served by accurate information on the various viewpoints, yet to question the need for public policy educators to undertake new efforts at incorporating diverse viewpoints. I think that well-intentioned people arrive at a negative assessment of the need for balance in two ways. First, if one felt that the new voices attempting to influence agriculture and natural resource policy did not represent legitimate interests, one might oppose all attempts to represent or publicize their opinions. Such a view demands loyalty to the traditional groups that have shaped agriculture and natural resource policy. Second, public policy analysts may feel that current practices are already balanced, and that the call for a new approach is really an attempt to introduce bias favoring minority views. I will rebut both views.

The first or loyalist viewpoint involves logical fallacies that will not be committed by clear thinkers. Many people whose roots lie in traditional agricultural communities may share the view that new groups demanding a seat at the table for negotiating agricultural policy are interlopers, sticking their noses in where they do not belong. There are some persuasive (if not compelling) arguments for this view. Historically, both agricultural policies and industrial policies alike have been thought the special preserve of producer interests. The idea that important public interests in environmental quality and consumer health are at stake in these matters is thus relatively new, and needs defense. Nevertheless, most people also understand that the matter of who does and does not have legitimate claims is itself always a key policy question. As such, when one takes the view that new environmental and consumer groups have no place at agriculture and natural resource policy round tables, one is taking an advocacy position in favor of one policy and against another. It may be appropriate for a partisan to express this view, but it is something else entirely when policy analysts and educators adopt it.

Educators cannot ignore environmental, consumer and other new voices without compromising their ethical obligation to promote non-partisan objectivity, but the interest argument also weighs in against even partisan or loyalist reasons for attempting to silence the expression of new understandings. As noted already, educators do a disservice to agricultural producers and rural communities when they fail to provide the traditional groups with accurate information about policy proposals and viewpoints that are advocated by new voices. The loyalty test that some have attempted to impose upon policy educators is ultimately self-defeating. Shooting the messenger seldom proves to be in one’s long-term strategic interest, however satisfying and justified it may seem in the heat of the moment.

The second reason to reject any need for new efforts to incorporate diverse new understandings in policy education derives from the view that policy problems are well understood, that existing approaches to policy analysis and education are adequate, and that only technical models and data are needed. The belief that existing approaches are balanced both reinforces and is reinforced by agricultural loyalties, but it is grounded in the traditions of science. It is a belief that is founded on the methodological presuppositions of some predominant approaches to policy analysis. Critical evaluation of the commitment to technical models and data therefore requires a theoretical detour.

Policy Choice: The Prevailing View

Objectivity in policy education has been understood in deceptively simple terms. The policy researcher predicts the consequences or impact of policy options; the policy educator reports the results of this research. Objective policy education is equated with unbiased reporting of expected consequences, conditioned by an estimate of their likelihood when necessary. Individuals are then thought to apply their own scale of values to rank the desirability of outcomes. Decision makers implement the policy option that is expected to produce expected outcomes that are, in their judgment, most consistent with the public good, or at least with the values of the constituency they represent. On this view, a change in policy is important because it produces consequences. It is the outcome or end state produced by policy change that is of interest to decision makers and affected parties. Choice is an admittedly value-laden and subjective process, but policy analysis and education can be objective to the extent that they confine themselves to the prediction and description of the end state that will be produced by any proposal for policy change.

Several complications in the research side of this picture have been noted with rising frequency. Most importantly, the decision about which options to model requires subjective judgment. A policy analyst wishing to discredit a particular option can do so by model-
ing an extreme version of it, so as to produce a projection of consequences that is as unrealistic as it is unacceptable. What is more, models should not be used for policy education until they are confirmed, but subjecting them to confirmation requires data, and data are often incomplete, absent and difficult to procure. The representation of probability, risk and uncertainty is tricky, and one can skew predictions by selecting the most favorable estimates in a range of probabilities. The process of modeling is itself open to methodological disputes and corrections, as analysts debate the completeness of ecological models, the inclusion of externalities, and the validity of non-behavioral data such as contingent valuation. These important considerations provide a basis for evaluating the objectivity of policy research, but they do not challenge the idea that balanced policy education consists solely in reporting predictions.

In research, the tools of science are used to model both the natural and the social world, then future states of the world can be predicted. The prevailing view of choice contends that value is represented by the preference rankings that individuals assign to these future states of the world, and that actual behavior reflects an individual's selection of the option that (subject to qualification by probability and risk) has the most preferred consequences. One especially influential interpretation of choice evaluates consequences in terms of their impact on personal welfare. This utilitarian view of choice often assumes further that individuals are sovereign judges of their own utility, an assumption thought to preclude interpersonal comparisons of utility, which, in turn, deprives the analyst of any non-arbitrary way to assess the relative goodness or badness of end states. Each person has sole sovereign authority for judging the utility of an end state, but their judgments are entirely self-referring, or subjective. Judgments of value are thought to be wholly private, non-observable reactions to projected end states. Policy research also assumes that individuals will make the trades needed to arrive at an end state distribution of goods and services, given initial constraints set by the distribution of resources and the rules for exchange. If policy redistributes the resources or changes the rules, economic behavior will bring about a different end state. Models and data allow the researcher to predict economic behavior and its corresponding end state.

These methodological assumptions adopted for policy research carry over into education. As new understandings percolate through the populace, people may assess the value of predicted end states in ways that differ from past assessments, but such changes in viewpoint are thought to be unobservable. They are, as it were, in the heads of people, therefore out of sight. Since there is thought to be no method for objective research on these new understandings or values, any attempt to educate about new understandings seems tenuous and lacking a basis in science. Since there is thought to be no meaningful way to compare or rank one person's judgment against another, the best that an objective policy educator can do is to inform others how policy options match up with predicted end states. The prevailing view of policy education presumes that whatever understandings or values are brought to the assessment of policy, it is predicted end states that are being assessed. People with different worldviews will value end states differently, but an objective policy educator can and should say nothing about these differences, except in so far as they are revealed in measurable economic behavior.

**The Prevailing View: A Criticism**

The latent behavioralism in the prevailing view of choice may be methodologically justified in many social science contexts. It is, for example, often important to ignore verbal reports of motivation for action when attempting to measure social or economic causality. Methodological rules may require the scientist to treat the reasons people give to support, justify or otherwise explain their judgments and actions as unobservable, but they can be readily observed in real life. Reasons form part of the language and culture of society. They help people cooperate, and they help individuals understand themselves and the world with which they must cope. To the extent that public policy is a joint coping activity, it would seem prudent to emphasize the sharing of reasons at least as much as one emphasizes the analysis of causes.

Individuals indeed make choices, but they do so against a backdrop of meanings and practices that is socially constructed, reproduced and maintained. Real people are not isolated, sovereign individuals emitting spontaneous and disconnected emotional reactions to predicted end states. Real people recognize the difference between meaningful choice and mindless response. Real people engage the world as members of a culture that has a shared history and linguistic community. History and language will shape not only a person's utility, but also the shape and contour of what is perceived as an option. Real people even change their minds. Ordinary language provides many tools for explaining and comparing relative values and real people routinely avail themselves of these tools as aids to choice. These are commonplace observations, but they are both overlooked and repressed by social scientists whose theoretical ambitions make them forget the broader world in which policy decisions must actually be made.

An alternative ideal of objectivity stipulates that an analysis is balanced when each of the diverse viewpoints has been fairly represented. This is the idea of balance and diversity implied above when I said that policy educators should faithfully represent the arguments, goals and viewpoints of those who adopt opposing positions. This is not to say, however, that policy educators should revert to mere journalism. To do so would be to neglect the substantial addi-
tion that research (including models and data) can make to our collective understanding of policy issues. Policy education should be grounded on research, but research must be broadened to include discovery and analysis of the arguments, goals and viewpoints held and advanced by a more diverse sector of the population.

**Policy Choice: The SSCP Model**

One of the more powerful adaptations of the prevailing view relies upon the so-called public choice school of policy analysis. Allen Schmid and James Shaffer (Shaffer et al.) have adapted industrial organization theory into a framework for public choice. The Schmid/ Shaffer theory analyzes policies in terms of situation, structure, conduct and performance (SSCP). Situation refers to the facts of nature, or the determinants of choice that cannot be modified through policy change. Structure refers to the rights, distribution of resources, norms and other rules that, together with the facts of nature, collectively determine the opportunity sets of interacting parties. Conduct is what people do given the circumstances of situation and structure. Schmid and Shaffer understand conduct as the self-interested optimizing that leads people to satisfy their preferences (understood as end states). Conduct links situation and structure to the end state, and is, in the traditional view, what economic and social theory is predominantly about. Performance might be any evaluation of policy, but the overwhelming tendency has been to equate performance with end state evaluation, just as it is done in the prevailing view. Consistent with the prevailing view of objectivity, situation, structure, conduct and performance would be used to analyze policy, but it is performance, understood as predicted end states, that will be reported by the "objective" policy educator, so that each person may decide for themselves which policy they prefer.

Schmid has used this framework to produce insightful analyses of the way people not only optimize performance from among the options they are given, but work to change the rules of the game so that they are presented with different options that produce end states they prefer even more. Schmid has shown that people have preferences about structure as well as performance, but by treating structure and conduct merely as instruments to bring about end states, he does not make a clean break with the behaviorism of the prevailing view. What the prevailing view fails to note is that much of the policy debate on contentious issues does not treat structure and conduct as if they were only instrumentally valuable, or that the ultimate test of value resides in preferences for end states.

The reasons people actually give for choice stipulate that certain forms of structure and conduct are proper (or improper) irrespective of the end states they produce. This result is thoroughly consistent with ordinary language. Our most familiar examples of immoral behavior, lying and promise breaking, are thought to involve some amount of wrongdoing even when they produce good consequences. To be sure, moral philosophy is full of so-called "tough-cases" in which the imperatives of truth-telling and promise-keeping are conflated by unwanted consequences; the point here is that these forms of conduct are typically thought requisite and praiseworthy irrespective of the consequences they bring about. Both ordinary language and ethical theory provide rich sources for articulating and then analyzing the non-consequential arguments that will be most readily applied to structure and conduct. In the interests of brevity, they can be summarized in terms of rights and virtues.

Ethical theory illuminates debates over structure as being primarily concerned with the establishment (or disestablishment) of rights. The prevailing view of policy choice recognizes rights, but interprets them as instruments for producing consequences. While it is clear enough that those who advocate policy change based on rights arguments generally approve of the end state associated with that change, the language of rights need not and frequently does not appeal to end states for justification. Indeed, the rejection of end state appeals was the main point of Robert Nozick's influential 1974 book, *Anarchy, State and Utopia*. Historically, rights are the minority's strongest weapon against majoritarian interests, and, as Ronald Dworkin has written in his work on law, once rights have been recognized as components of a legal structure, their protection over-rides or "trumps" arguments based on social consequences. When policy educators assume that structure is justified solely by individuals' assessments of the end state it produces, they neglect the tradition of rights, and compromise the objectivity of their analysis by according priority to that tradition of ethical theory represented by Jeremy Bentham, who derided rights as "nonsense on stilts."

Since rights arguments are frequently advanced in support of the politically weak and for minority claims, one would expect that agriculture and natural resource policy lends itself to important rights arguments with respect to issues such as the health and welfare of agricultural workers, and to the role and status of women. However, two areas in which rights arguments are crucial involve claims advanced by relatively powerful groups: food safety and wildlife preservation. With respect to food, consumer groups have claimed rights to informed consent regarding the origins of their food. Food labels are the policy vehicles that are most frequently associated with this right, though other forms of regulation are also suggested. The use of chemicals or of recombinant DNA technology are of particular interest to consumers, but some groups have claimed the right on the grounds of a desire to express solidarity with regional family farms. The right of informed consent is claimed without regard to any alleged health benefit associated with consumption of the food. Furthermore, the right is claimed irrespective of any intention to exercise it in making food choices; consumers may claim the right to informed consent even when they have no intention of refusing to
purchase and consume the foods. Therefore, the importance of this right may not be reflected in consumer behavior (Thompson, 1993).

Rights arguments are also prominent in endangered species controversies. Ironically, it is the rights of traditional agricultural interests that are often asserted against policies being advocated by environmental groups. Throughout the west, ranchers have resorted to the argument that private property rights are being threatened by environmental policies designed to preserve habitat for endangered species. Property rights are non-interference rights that permit individual total discretion in the use of a good, up to the point at which such use harms or violates non-interference rights of another specific individual. The constraints of the present context preclude even a cursory discussion of the theory behind non-interference rights. It is worth noting, however, that advocates of non-interference rights emphatically insist that rights may never be violated on the grounds of providing generally (or even overwhelmingly) beneficial services.

These private property arguments present a good comparison between the prevailing view of policy education and the SSCP model. The prevailing view would simply predict costs and benefits to both environment and producers that would be associated with a change in policy. Ranchers who accept the prevailing view of what the policy dispute is about face several problems. First, they are unlikely to cite the long history of political theory on private property rights in making their case, denying themselves the strongest legal and political argument. Second, they must instead use complex technical models to show that their production has greater value than the value of species conservation, which will be measured according to a bewildering array of ecological, travel cost, and contingent valuation models. This debate promises much work for economists, but little hope of shared understandings among non-specialists. Finally, ranchers would appear obliged to accept compensation for the measured costs of a conservation plan, should one be proffered. Yet a right that may be coercively abrogated by offering compensation is not a true right at all. The ethics view, by contrast, would interpret the ranchers as arguing that structure must respect private property rights, or else violate constitutional principles that are the foundation of consensual governance. As such, the burden of proof is on the other side, and it is a heavy one. There are, of course, rights arguments asserting an opposing claim on behalf of endangered species themselves, but space does not permit their exposition.

The SSCP view also facilitates our understanding of the link between conduct and character. Clearly, many of the main themes of ethical theory identify certain forms of conduct as representing virtuous or sound character, while others are evidence of turpitude, corruption and venality. Like rights, character or virtue ethics introduces complications into public policy analysis that cannot be examined in the present context, but discussion of “the character issue” with respect to the Clinton presidency makes it clear that this tradition of thought is alive and being applied in crucial areas of public policy. Character or virtue arguments refer to the conduct part of an SSCP analysis, and would assert that policies that engender inappropriate conduct are unacceptable. It seems likely that the most powerful arguments against the current system of social welfare are conduct arguments, for example, since it is at least less clear that the costs of the system outweigh its benefits.

Character and virtue arguments are very important in agriculture and natural resource policy. The long tradition of agricultural policy protecting family farms and rural life is difficult to justify without at least implicit appeal to the widely shared belief that farms and rural communities encourage the development of strong moral character. It is also much easier to take environmental concepts such as respect for nature seriously when they are interpreted as statements about character and conduct, rather than through conceits such as existence value or deep ecology (Thompson, 1991). Nevertheless, it must be admitted that the tradition of ethical theory associated with virtue, character and community is built upon many beliefs that social science has shown to be dubious. Are farm kids truly more hard working and honest than kids from the suburb? Does living in an mobile society really destroy the attachment to friends and family that comes naturally to a person deriving a lifetime's income from the same plot of land? Virtue ethics has the appeal of common sense in asserting that rules and environments can encourage habits of mind and of behavior, but it asserts causal relationships that are notoriously difficult to prove. While it is important to give virtue arguments their due in explaining alternative viewpoints on public policy, they will make policy analysts schooled in the social sciences uneasy.

Finally, utilitarian or consequentialist arguments do evaluate structure and conduct in terms of the consequences or end states produced. As noted already, this way of assessing policy is already well represented in policy education. It is the typical interpretation given to performance by those who learned SSCP at Michigan State. The history and theory of ethics does have something to offer for saying why certain end states are good, and others are bad, but this venerable tradition in ethics has existed in some form since antiquity, and it cannot be given a decent exposition in the present context.

The ability to predict consequences will always strengthen the appeal of performance-focused assessments. The predictive power of science thus makes scientific models and consequential ethics into natural bedfellows. There is clearly much good that has and will continue to come from this alliance, but the use of scientific models can be questioned when the consequential viewpoint is simply assumed uncritically. Performance is but one part of policy, and conse-
quence assessment is but one way to formulate an argument in favor of policies. Objectivity requires equal consideration and reporting of arguments that attribute primary importance to structure, most likely through appeal to rights, and of arguments that focus on conduct, through appeals to virtue and community.

What Have We Achieved?

The new understandings of agriculture and natural resources that are now impinging on the policy process need to be accommodated. Both democracy and self-interest demand it. I could summarize my remarks by saying that marginal returns on investment in models and data diminish rapidly as diverse viewpoints enter the debate on agriculture and natural resources. The prevailing view of policy education produces a welter of technical detail to support end state predictions that are irrelevant to considerations of rights or character. Even worse, using technical detail to "snow" opponents and obfuscate issues justifiably undermines the broader public's confidence in science (and scientists). This loss of confidence reduces the persuasiveness of models and data, even when they are used properly.

Better practice requires that scientific results be presented in a balanced context that respects the shared meanings and traditions of argument that persist in ordinary, non-scientific language. Policy educators who continue to rely on the prevailing view will have only themselves to blame when their predictions are ignored and their own character is questioned. The ethics-oriented adaption of SSCP will not guarantee better policy or better accommodation of multiple interests, but it will facilitate both. It will make fair and accurate representation of opposing viewpoints easier to understand. It will use models and data in the formulation of consequence predicting models where they are appropriate, but will appeal to longstanding traditions of legal, historical and philosophical analysis in formulating appeals to rights and virtue.

Any approach to policy education must be well executed. The SSCP approach is hardly a cookbook that will guarantee the representation of diverse viewpoints and arguments. A policy educator can clearly use the framework I have described to willfully pass over inconvenient viewpoints, and might still exclude groups and arguments unintentionally. The ethics view recommends itself primarily because it draws attention to important arguments that have been systematically overlooked by policy educators who have been schooled in the assumptions of the prevailing view. Since these arguments influence the way both traditional interests and new contenders understand agriculture and natural resources, it is reasonable to think they will become important components of better communication and of research on policy that integrates scientific models into intelligible and informative efforts at policy education.

Fair and accurate representation of the reasons why people campaign for policy proposals requires attention to the way that structure and conduct are often the object of concern, rather than predicted performance. One would hope and expect that more accurate policy education on the reasons for disagreement would, in some cases, at least, facilitate the formation of consensus or the identification of compromise. When people can see each other as reasonable, there is increased opportunity for innovative and mutually acceptable collaborative problem solving. There is much research to be done on whether and how this framework can be utilized in effective problem solving, and it is difficult at this juncture to predict or measure its potential (Pagano and Abdalla).

Opponents will at least be better informed of the reasons why others disagree, and may, on occasion, find elements of compromise and common interest that will make some problems easier to solve. That is what we should expect from objective policy education, and nothing less.

REFERENCES