I. Introduction: The Relevance of a Course on Political and Bureaucratic Processes or the Behavior of Governmental Institutions

In preparing people to work in the public sector, it seems essential that they come to understand something about the political and bureaucratic processes that invigorate or strangle policy ideas. If the training is designed to prepare people for <u>operational</u> roles as managers, advocates, or political staffers, the need to teach about political and bureaucratic processes is obvious. But even if the training is limited to advisory roles as analysts or policy researchers, it is important to teach methods for gauging the feasibility of different policy ideas. Without such capabilities, policy analysts would risk giving <u>bad</u> advice (in the case that their predictions about the likely effects of a policy were based on expectations of government capabilities to implement the policy that were wildly mistaken), or <u>irrelevant</u> advice (in the case that they proposed policies which were simply impossible for the government to adopt and implement).

Despite the obvious need for developing a sense for the way government machinery actually works, it has proved difficult to design curriculum effective for this purpose and to fit the curriculum into academic institutions. These problems are, of course, related. If it could be shown that a curriculum existed which was effective in teaching people about political and bureaucratic processes (<u>and</u> that capitalized on the unique characteristics of universities), then academic institutions would find the curriculum easy to accommodate. Lacking such evidence,

universities are justified in remaining hostile. After all, the observation that knowledge of political and bureaucratic processes is essential to effective public service does not by itself imply that such knowledge should be taught in university based programs for training public officials. If we didn't know what to teach, or if the knowledge could be communicated more effectively in a different setting, it would be foolish to insist that universities nonetheless try to explain political and bureaucratic processes.

I do not wish to avoid the requirement for a careful demonstration that an effective curriculum exists. In fact, the major purpose of this paper is precisely to _meet_ this requirement. I want the claims of the proposed curriculum to rest on a great deal more than the mere relevance of its subject matter. Before presenting the curriculum, however, it is useful to clear up some confusion about the criteria to be used in evaluating it.

II. Criteria for Evaluating a Course on Political and Bureaucratic Processes in a Professional School Training Public Officials

    A. The Academic View:

A common academic view is that the distinctive competence of universities lies in developing, testing and ultimately imparting powerful generalizations. The interesting generalizations are of two different types. One type is an empirical assertion about the actual behavior of the world based on either a rigorous theoretical deduction, or a set of empirical observations, or (in the best of all worlds) both. A second type of generalization is a formally derived implication of a given logical structure of choice. In the academic view, then, an appropriate university-based curriculum on

political and bureaucratic processes would present established generalizations about the behavior of governmental institutions, the logically ordered theorems and empirical evidence which sustain the generalizations, and perhaps some introduction to the rigorous logic of using these empirical generalizations in making choices about how to intervene in the process. Unfortunately, since there appear to be few interesting, well established generalizations about the behavior of governmental institutions, and since both the methods used to sustain what generalizations exist and the formal logic of rational choice overlap with other disciplines and can be taught directly as general methods, there is little left to be presented in a course devoted exclusively to teaching students about political and bureaucratic processes. To be sure, there may be some crude, disorganized "craft knowledge" lying about that partially substitutes for rigorous scientific knowledge, but universities have no special competence in organizing and imparting craft knowledge. Indeed, universities may be significantly disadvantaged when compared to apprenticeships and raw experience in teaching such knowledge. Thus, the academic view asserts that there is little to be done in the area of teaching about political and bureaucratic processes that draws on the distinctive competence of universities.

One can dispute this academic view at a variety of points. For example, one can argue that many interesting descriptive generalizations about the nature of political and bureaucratic processes do exist. We know a great deal about how the different institutions that comprise the U.S. governmental system behave and interact, and how the system is evolving. To be sure, the generalizations are usually based on neither numerous empirical observations of behavior in comparable situations, nor formal deductions from a rigorously defined behavioral model. Moreover, the generalizations are not sufficiently detailed and precise to yield predictions about particular decisions or events.

Still, despite these "weaknesses," the propositions can be used to make fairly reliable qualitative predictions about the behavior of the larger governmental system. As such, the generalizations are about as useful in understanding and predicting governmental performance as economic theory is in understanding and predicting the performance of the U.S. economy Both offer good, qualitative predictions of aggregate performance and offer some insight into the actual processes which yield the anticipated result. Thus, even if we accepted the premise that "generalizations" about political and bureaucratic behavior had to constitute the core of an academic curriculum in this area, something would be available to teach. We would simply have to figure out how to compress the knowledge we expect of a graduate political science student specializing in "American Government" into a single course for Public Policy students.

B. An Alternative View: Codifying and Teaching "Craft Knowledge"

My own view, however, is that this response to the academic argument gives too much away. It forces the curriculum into a particular mold - one that not only diverts student attention from the professional problems that originally justified the course, but also cuts the students off from a mother lode of craft knowledge which probably constitutes the area's richest intellectual resources. Hence, my critique of the academic argument is much more radical: it attacks the fundamental premise that universities should only be in the business of developing and imparting generalizations. Universities have a long tradition of codifying and imparting "professional craft knowledge" as well as presenting "scientific generalizations." In medicine, law, architecture, and other fields universities have shown themselves to be effective in performing this

function. Hence, the best response to the academic argument may be to argue that a valuable stock of professional craft knowledge about political and bureaucratic processes exists, and that it is part of a university's distinctive competence to organize and teach this craft knowledge. To decide whether my criticism is persuasive, it is crucial to develop the idea of "professional craft knowledge" more carefully than I have done so far.

C. Craft Knowledge as Something Different Than Immature Scientific Knowledge

Craft knowledge often sounds as though it was similar but distinctly inferior to scientific knowledge. Like scientific knowledge, craft knowledge is a set of descriptive propositions about the world, and a set of logical rules for making optimal choices. The difference, however, is that the propositions and rules embodied in craft knowledge are relatively "weak:" the terms included in the propositions are not well defined; the descriptive propositions are established by neither logical deduction from behavioral axioms nor by extensive empirical evidence; the principles of choice in given situations are never formally and explicitly stated; and both descriptive propositions and principles of choice have uncertain domains (i.e. it is not clear over what set of institutions and circumstances the propositions will offer reliable guidance). Because of these weaknesses, it is not possible to make consistent, reproducible calculations about how to handle specific situations. If craft knowledge could be made more rigorous and complete, then it would become possible to make reproducible calculations, and there would be clear advantages to doing so. Thus, craft knowledge is nothing more than a set of propositions and principles waiting to be developed into scientific knowledge.

To some extent, this view is consistent with the way I want to define "craft knowledge." I want it to include both descriptive propositions about the world and principles of choice. Moreover, these propositions will turn out to be less well defined and structured than those characteristics of scientific knowledge. Where I disagree with the academic view of craft knowledge, however, is in the judgment that craft knowledge is nothing more than a set of descriptive empirical propositions and logical choice rules, and that scientific knowledge is always to be preferred in reasoning about particular situations.

What I think "craft knowledge" adds to the descriptive propositions and rigorous choice structures characteristic of "scientific knowledge" is a description of the common professional tasks faced by practitioners, and a selective orientation to the empirical world of political and bureaucratic processes keyed to each of the common professional tasks. In effect, the underlying empirical reality of the processes, and is organized and presented for view in slightly different terms depending on the professional task to be accomplished.

Furthermore, I think the very imprecision of the propositions characteristic of craft knowledge have some advantages in reasoning about messy, particular situations. If the concepts and rules don't have sharp edges, then they may be more easily adapted to use in new situations without doing unnecessary violence to the particulars of that new situation. Moreover, as the concepts are used in new and different situations, they may take on a richness that enhances their value in future situations. To be sure, "reproducibility" in the calculation and reasoning may be sacrificed, but this loss may be more than offset by an increased ability to accomodate distinctive features of the particular situation in the

categories and principles, enriched by previous experiences, and held in one's mind as he approaches a new choice situation may be much better armament in attacking a decision problem than a set of rigorously defined concepts, formal rules which relate them to one another, and another set of formal rules which relate the empirical propositions to the decision problem. These views are sufficiently important and controversial that they deserve a fuller airing.

D. People in Professional Roles:

Craft knowledge exists and is important because people have jobs in which they are expected to accomplish purposes by operating on very complex causal systems in particular situations. Physicians are expected to make people well; lawyers are expected to obtain justice for their clients; architects are expected to create buildings which accommodate intended activities in a structure which is attractive, economical, and expressive of its distinctive purposes; managers are expected to mobilize and co-ordinate the activites of large numbers of people so that their combined activity adds up to a great deal more than would have been possible if each worked alone; and politicans and statesmen are expected to discover and pursue the "public interest" in the tangled web of pressures they face and concerns they feel. They accomplish these general purposes by deciding how to deploy their personal efforts in streams of particular situations.

Now, it is _possible_ to describe the decision problems which these people face as a series of optimizing decisions. They must decide how actions they might take will affect underlying causal processes and produce effects on

attributes of the world that they take as their objectives. Once this definition of the problem of professionals is accepted, it seems that scientific knowledge about the behavior of the world, and a rigorous logic of optimization would come to play a major (perhaps dominant) role in guiding their decisions. After all, responsible choice requires both an ability to foresee the likely consequences of alternative actions, and an explicit or implicit evaluation of the full set of consequences. The ability to predict, in turn, depends on "scientific knowledge" about behavioral relationships in the world. And the capacity to evaluate and compare alternatives in a complex, uncertain world may depend on mastery of a fairly complicated optimizing calculation. In short, it seems that as long as we see the problem of professionals as one of making decisions in particular situations, we must rely on "scientific knowledge." Thus, physicians must be extremely familiar with biology and decision analysis; lawyers must have studied jurisprudence and relate that to the intensity and particular shape of their advocacy; architects must understand physics, psychology and sociology and use that knowledge to maximize some incredibly complex objective function that includes arguments relating to the satisfactions of people working in or viewing the building all properly hedged against future changes in either the purposes of the building or the surrounding environment.

A great deal of power resides in this claim that complicated choices importantly affecting individual human beings ought to be based on accurate scientific knowledge of technical and behavioral relationships in the world and an explicit rigorous, optimizing calculation. Indeed, it seems the essense of responsible choice. To do less would be to make a decision without a well organized understanding of the likely consequences - by definition, an irresponsible act. Anyone who has been faced with a

large, complicated choice that will affect individual human beings knows how easy it is to be intimidated by the argument that he ought to have confident knowledge of the consequences of his action before he acts.

    E. Limitations of "Scientific Knowledge" in Resolving Professional Problems

The fundamental weakness of this position - indeed, its near absurdity - becomes apparent only when one takes it seriously and tries to behave consistently with it. When one takes a messy, particular professional problem and tries to solve it in a scientific way, two limitations of scientific knowledge are revealed - one quite fundamental, the other less fundamental, but certain to be troubling over at least the next few generations. Since craft knowledge is designed precisely to compensate for these limitations of scientific knowledge, it is important to see the limitations to scientific knowledge in handling particular professional problems.

The fundamental limitation is the simple fact that two crucial components of the optimizing calculation in particular situations cannot be derived from either scientific knowledge of behavioral relationships in the world or the formal logic of optimization. Optimizing decisions clearly require a set of objectives. But where do such objectives come from? How does one feature of the world come to be included as part of an objective function and another excluded? The principle for including attributes in a set of objectives seems quite clear: attributes of the world which have value (or should have value) in and of themselves and that are likely to be affected by a given choice should be included within the objective function. Otherwise, a risk of sub-optimization and the creation of some externality exists in the definition of the choice situation. But, while the principle seems clear, it is hardly

a logical or empirical matter to decide which attributes of the world should be included in the definition of the objectives. One must study and reflect on the way the world appears to those involved in the particular situation and shape a set of objectives that captures some combination of their concerns.

Similarly, it is quite clear that an optimizing choice depends on the definition of a set of possible actions. But, again, where do these alternatives come from? They may be suggested by variables included in our description of the causal world on which we are trying to operate, or perhaps equally fruitfully by knowledge of and logical manipulations of current practices. But sometimes wholly new alternative actions can be invented. And it is nearly always possible to think of new and interesting combinations of actions to use in managing a particular situation. Thus, just as there is a creative problem in shaping the space of objectives, there is also a creative problem in shaping the space of alternative actions. Imagination, skepticism, curiosity and close attention to the particular situation are likely to be the sources of useful ideas - not a scientific body of knowledge.

Thus, empirical knowledge, causal modelling, and the logic of optimization cannot in principle completely structure and determine the optimization decision of professionals on particular situations: they cannot yield either the objectives to be pursued, or the alternative actions to be evaluated.

A less fundamental but equally constraining limitation for the role of scientific knowledge and rigorous calculation in guiding professional choices for the foreseeable future is simply that our current stock of empirical knowledge, modelling capabilities and optimizing algorithms are simply not sufficient to reliably structure and guide most important choices. The particular world, as it appears to the decisionmaker, is apt to be detailed and subtle - hence complex. It is also likely to be relatively unique - hence comparable empirical experience to use in testing alternative hypotheses about the behavioral

relationships or the likely consequences of alternative actions will be lacking. Since our current statistical procedures involve relatively simple models of causal relationships and require large amounts of recorded empirical experience to yield reliable predictions, and since our modelling and optimization procedures work most easily with a small number of variables and a restricted set of functional relationships chosen for computational convenience, these tools may fail to reliably capture what the decisionmaker sees in the particular situation. Gradually, of course, these tools may improve and capture more of the subtlely and nuance of the actual situation. But is important to see that if we want to describe the particular situation with loyalty to many of its particular features, we necessarily end up with a complex optimization and modelling problem with only a limited amount of empirical information to validate the hypothesized relationships. It is a little like trying to figure out how one can maneuver a falling leaf into a given position by blowing on it when all one knows is some general rules about gravity and air pressure.

In sum, while it is possible to view people in professional jobs as making streams of particular optimization decisions based on scientific knowledge of behaviorial relationships and rigorous optimization calculations, it is quite clear that that is not what they do. Physicians seem to get along quite well without a complete knowledge of either biology or procedures for making decisions under uncertainty. Lawyers also rarely seem to rely on a fundamental knowledge of jurisprudence to do their job well. And I think it is ludicrous to conceive of an architect's proposed plan for a building as the result of an optimization procedure in which a complicated objective function was maximized on the basis of established psychological, sociological and aesthetic principles. Thus, it does not seem that scientific knowledge and rigorous optimization procedures are essential to tolerably effective performance in many professional roles. Moreover, since we know that they alone are not

sufficient to guide particular choices in concrete situations, we can
conclude that scientific knowledge and rigorous optimization calculations
are neither necessary nor sufficient for intelligent, tolerably effective
and responsible decisionmaking.

Note that to say this is neither to condone current professional practices
as they now stand, nor to deny the potential value of empirical knowledge
and rigorous calculation. I want to improve professional practice not leave
it as it is. And I would love to see the development of new empirical
generalizations, new modelling procedures, and new optimization algorithms.
My only point is that doing a good job of making implicit optimization
decisions in a complicated, particular world is not now the same as relying on
scientific knowledge of behavioral relationships and rigorous optimization
procedures. Furthermore, I think it is possible that the path towards
improving professional practice over the next 20 years does not lie
in simply strengthening the stock of empirical knowledge, analytic
models, and rigorous optimizing calculations, but in some other direction.
Perhaps I can indicate this direction by drawing a very sharp distinction
in alternative ways of approaching very messy particular problems that
cannot be fully structured and filled out by formal approaches and powerful
empirical evidence.

F. Craft Knowledge As An Alternative Approach to Professional Decision-
    making in a Particular World

If one faces a complex choice, two broad alternative exist. One approach
emphasizes formalism: a reliance on solid empirical evidence and a rigorous
optimizing logic to yield a conclusion about how to intervene. The description
of the decision problem is limited to evidence and reasoning that can be
carefully and rigorously assessed with current methods. In effect, this

approach says "if the decision problem does in fact have the structure which I imput to it (i.e. a given objective function; a specified set of alternatives; and a probabilistic model of the empirical world that relates alternative actions to objectives), then I can deduce rigorously (and reproducibly) the best possible intervention."

The strength of this approach lies in power of the implication, or the rigor of the final calculation. The main problem with the approach is the inability of the formal characterization of the decision to capture all the relevant detail of the immediate situation. Despite the ornateness and sophistication of the ultimate calculation, the calculation usually turns out to depend on a starkly simplified view of the world. Some important objectives are left out; some interesting alternatives ignored; and some crucial causal mechanisms of the world inadequately captured. These oversights may be sufficient to virtually eliminate any advantage that comes from the possibility of rigorously deriving the conclusion.

There are two standard rebuttals to this criticism of formalism. One is to argue that the cost of abstracting from the real situation can be calibrated by doing "sensitivity analyses" of selected changes in the formal description of the problem. In principle this is correct, but in practice the claim is somewhat disingenuous. Analysts rarely experiment with a radical re-structuring of the decision problem. They may tinker with changing the values of specific parameters, but they rarely add many new parameters or introduce more complex functional relationships. And the simple fact of the matter is that ther are many functional relationships which cannot now be handled. Hence, the real cost of abstracting from the immediate situation is not adequately calibrated by what is called a sensitivity analysis.

The second rebuttal to this criticism of formalism is to suggest that there is no responsible alternative to formalism. If one doesn't press for solid empirical evidence properly appraised and for rigorous optimizing logic, one is left in a commonplace world of intuition, guess-work, superstition and ignorance. Hence, the drive towards formalism is the only responsible way to make a choice.

In fact, I believe that a second alternative to making decisions on complex situations exists that may be _more_ responsible than a drive towards formalism. The alternative can be seen simply by deciding the trade-off between "accurate characterization of the problem" and "rigorous conclusion" differently than the formalists recommend. Suppose that instead of pressing for a rigorous conclusion on the basis of an inadequate characterization of the problem, we decided to go for an accurate characterization of the complexities of the real problem and sacrificed the rigor of the conclusion. We would include a variety of objectives, a variety of alternatives, and a complex view of the empirical world. By inventing such a complex world, the possibility of computing an _optimal_ choice would disappear. But some discipline could still be exerted on the ultimate choice. We could say that the recommended choice didn't appear to be inconsistent with our complex view of the problem, and that it was hard to imagine a superior choice to the one we proposed. But we would not be able to defend the recommendation as the clear and unique implication of a logically structured situation.

It is this way of approaching complex choice situations that I want to call the essence of "craft knowledge." In effect, it goes for a more accurate and rich characterization of the particular decision problem, allowing imagination and creativity more scope in considering the particular situation, but sacrifices some of the rigor of the ultimate conclusion. It is an

approach that is as thoughtful, careful, and deliberate as the formal approach, and that admires logic and evidence as much as a scientific approach, but which owes its loyalty more to an accurate characterization of a particular decision problem than to the possibility of reaching a rigorous, reproducible conclusion. It is an approach designed to draw one into a close examination of the immediate, empirical world rather than drive us away from it.

A priori, I do not think it is obvious which of these approaches will yield the most powerful insights about choice situations. Because many of us are academics and like to be able to defend conclusions by pointing to a formally structured method for reaching the conclusion, we are biased in the direction of preferring formalism. But it is not clear that the conservatism that requires this kind of justification is the most efficient or effective way of making choices. After all, I think most of us know that we often see the conclusion to a messy problem on an intuitive basis early in the calculation, and then spend a great deal of time justifying the intuitive solution with a formal approach. If this is true, and if the value in the choice comes from seeing the solution, then it may be inefficient to strain for the justification. This is particularly true if our formalization of the problem involves shrinking and abstracting the problem.

Of course, one can always argue that it is not necessary to choose between these approaches. One can rely on both scientific and craft knowledge to help in resolving a given decision problem. To some extent this is true. But the choice one cannot ever escape is the choice about how much time and effort to devote exploring the detailed contours of a

particular situation, and how much to spend pressing for a rigorous

conclusion from available empirical information or a rigorous internal

logic. Ultimately, time and effort will be limited and we must decide

where it can best be spent in guiding a choice. More often than

academics would like to admit, the reasonable, responsible choice is

likely to involve becoming more familiar with the immediate empirical

situation and engaging in some deliberate and careful but ultimately

very rough ordering of relationships and magnitudes.

G. Criteria for a Curriculum that Codifies and Imparts "Craft
   Knowledge"

If the argument above was successful in persuading people that

"craft knowledge" exists and is valuable, the question still remains what

would a curriculum that proposed to teach "craft knowledge" look like?

How would it compare with a curriculum designed to teach scientific

knowledge? My conclusions are the following.

First, the curriculum would be designed to acquaint students with the

variety of professional tasks that they would be likely to encounter which

required some knowledge of political and bureaucratic processes. These

tasks would differ from one another in that they would invite different

distributions of observation and analysis over the governmental institutions

and processes that were somehow involved in the professional task.

Second, the curriculum would build up general intuitions about how

governmental institutions are likely to behave and what micro-processes

cause them to behave that way. (If we stay close to the analogy of a craftsman,

the course would try to build up that students' knowledge of the "medium"   .

in which theywould be working.) One can think of this part of the curriculum

as developing "models" of the political and bureaucratic world, but the

"models" would neither be simple, nor formally defined. In fact, they would be deliberately complex and imprecise - the better to unearth a large number of factors which might be operating in new particular situations. Moreover, the models would always be understood in terms of particular examples, not as formal statements.

Third, the curriculum would spend a lot of time helping students learn how to pick out and order facts of a particular situation that are relevant to the completion of professional assignments. In effect, this means using their knowledge of what the professional assignments require and their heuristic models to search the mass of information immediately available about particular situations. It means weighing and ordering those facts to support a solution to the professional problem.

Fourth, the curriculum would introduce students to the common methods of intervening in political and bureaucratic processes to alter the likely behavior of the system. (Again if we stay close to the craftsman analogy, this part of the curriculum is designed to acquaint students with the power and characteristics of tools available to shape the medium.) The propositions about the characteristics of these instruments would never be complete, and would always be qualified in some uncertain way, but the statements would provide some guidance about how to use the tools.

Fifth, the curriculum would allow students to practice making complete calculations and entire arguments in particular situations. It would always turn out to be difficult to have their recommended solutions to particular professional problems emerge cleanly from an analytic model. But it is precisely because of this limitation that the students should practice making the leap from a complex diagnosis to a recommended solution. The basic

assumption is that a good way of reaching recommendations in very difficult choice situations may be to make an intuitive leap to a conclusion, and then check to see if there is anything obviously wrong with the proposed solution. By going through this process under pressure from faculty and students, the students may build up a fairly robust capability to propose imaginative and persuasive solutions to particular professional problems.

Thus, a curriculum to codify and impart craft knowledge would look quite different from a curriculum designed to teach scientific knowledge and methods. The interesting thing to see is that many features of this curriculum result _not_ from the "weaknesses" of our scientific knowledge of political and bureaucratic processes, but rather from the desire to teach people how to use this knowledge in professional assignments. It is the need to render professional judgments about how the system will behave and what interventions should be attempted in messy, particular situations that gives the curriculm its distinctive shape and focus. It is in light of these criteria that I think the curriculum in Public Policy 240 and Public Policy 260 should be evaluated.

III. The Public Policy/Curriculum on Political and Bureaucratic
Processes and Management

A. Assumptions About Initial Orientations and Capabilities of
Students

In designing a curriculum concerned with politican and bureaucratic
processes and management we begin with a few assumptions about the orientation
and capabilities of our students. We assume: (1) that entering students
(as well as most other people) are both ill-equipped and poorly motivated to
do detailed analysis of how political and bureaucratic processes will affect
policies as chosen and implemented in specific substantive areas; and (2) that
these disabilities will prove crippling in nearly all professional roles in
the public sector. Entering students think of the governmental process in
categories that are too few, too general, too vague, and too limited to be
of much use in guiding searches for information about the real nature of the
process, or in devising intervention strategies that target efficiently on
the key pieces of the process that must be transformed to produce a desired
result. More specifically, entering students think of "the government" as
a single unit; they concentrate primarily on policy choices rather than the
process of implementation; and they explain government actions with rather crude
notions of the "interests" of people in the government and no attention paid to
the issues of capability and the various mechanisms that aggregate interests
and co-ordinate actions within the government.

Moreover, despite the manifest inadequacies of their initial conceptions
of governmental processes, students are often somewhat resistant to learning
more about how it works, and how this knowledge should be used in different

professional roles. Sometimes the resistance is based on the belief that knowledge of governmental processes is irrelevant (or even inimical) to the "technical" problem of desining policy. More often the resistance is based on a view that there is nothing systematic that can be taught about analyzing governmental processes, or that all useful knowledge about the process can be learned in the first six months of the job.

Thus, the fundamental pedagogic objectives of our curriculum in this area are to persuade students that knowledge of political and bureaucratic processes is fundamental to a variety of professional roles, and to equip them with the general skills necessary to analyze the processes in particular settings quickly and efficiently. In doing so, we lean hard against the natural tendencies of the students to ignore the problem, or to think about the problem in general and vague categories.

B. A Unifying Idea for the Curriculum: Calibrating the Potential of Given Political and Bureaucratic Settings

The most general description of the cognitive skills we seek to develop among our students is that we want them to be able to look into a particular arrangement of institutions, organizational capabilities, individual motivations, etc. and discover what potential for governmental action is latent in that situation. We want them to be able to make a roughly accurate assessment of governmental capabilities for action. This capability is important not only for professional assignments which require only predictions, but also for assignments which require some form of intervention. The idea is that it is possible to gauge something like the "potential energy" of the government that is contained in the current arrangement and relationships of its parts and evaluated in terms of some concept of how we would like the government to be able to perform.

We can think of gauging the "potential of a particular setting" as a cognitive problem that involves at least three steps. The first step is simply locating the "relevant" actors within the governmental institutions at some level of aggregation that is appropriate for the analysis. The second step is being able to make a predictions about how the individual actors are likely to behave, and how the independent behavior will be aggregated to a result that can be evaluated. The third step involves developing a set of ideas about possible interventions, and being able to see how those interventions might alter the set of possible results that could emerge from a given dynamic situation.

Note that the second and third steps are at least partly empirical issues. They depend on implicit or explicit generalizations about the behavior of kinds of actions in political and bureaucratic settings. The first step, however, is not an empirical issue. It depends on a criterion for judging the relevance of a given actor's inclinations and capabilities rather than an empirical judgment of what they are. The questions in the first step of the calculation are: what actors should I be looking at, and what particular parts of their inclinations and capabilities should I be assessing? It is a problem of locating the observer in the world.

C. Two Different Criteria for Defining Relevant Pieces of the Political/ Bureaucratic Processes

In the Public Policy 240/260 curriculum, we rely on two different general criteria for defining "relevance." Broadly (and somewhat simplistically) the two criteria could be called: "policy relevance," and "position relevance." The criteria of "policy relevance" locates relevant actors and issues by starting with a curiosity about how the government is now (or could in the

in handling the problem of malnutrition in the U.S. How are the current authority, resources, and activities of the government organized to affect this problem either directly or indirectly?" The motivation is provided by the desire to compare some idea of desired behavior with observed or likely behavior.

The criterion of "position relevance" is quite different. Here one begins with a particular position in the process. One is responsible for a variety of policy issues, but he has effective influence over nothing but bits and pieces of the actual capability to act effectively on behalf of substantive objectives. Moreover, because one is concerned about maximizing his long run impact on the government, he must consider the possibilities of building up the power of his position over time by paying attention to continuing interdependent relationships with other actors, by trading off some substantive issues for others that are more important, or by waiting for favorable opportunities to act. In effect, this criterion begins with a person in a given position and asks how he should behave to maximize his long run contribution to the society across time and many substantive issues.

D. Public Policy 240 and the Criteria of "Policy Relevance"

These two different criteria for judging relevance turn out to provide the basic organizational structures for the curriculum of Public Policy 240 and Public Policy 260. Public Policy 240 (given as a one semester course in the Fall) relies almost exclusively on the criterion of "policy relevance" for organizing its analyses of political and bureaucratic settings. The fundamental approach in looking at each case is the logic of "mapping backwards" from desired outcomes, to "final government actions" which have an impact on the outcome, to an analysis of why the governmental actions we observe are emerging from the governmental machinery, and finally to a prediction about the future shape of governmental action in this area in the absence

This turns out to be a useful way to define relevance for sever<
different reasons. Fist, the use of this criterion re-inforces some
powerful normative biases of the curriculum. We think that our stude
should be primarily converned about achieving outcomes. We think tha
far too many people enter the government with no other purpose than me
surviving on the job. We want our students to have a strong orientati
the substantive results of their effort. Moreover, if we force studen
to concentrate on outcomes, we also force them to pay attention to the
of implementation as well as the process of policy choice. Since we w
that implementation is often overlooked, we want the students to intern
an analytic framework for approaching policy problems that accords prope
attention to this problem. Thus, the criterion of policy relevance stre
the students' orientations towards substantive objectives and implementa
rather than leaving them in the world of merely surviving in a job and tl
of the processes of government primarily in terms of the problem of polic
choice.

Second, if we rely on the criterion of policy relevance to structure
our analyses as political and bureaucratic processes, it become possible
to range rather broadly over the set of government institutions. We can
look at: 1) large bureaucratic organizations; 2) formal and informal
policy making processes within executive agencies and legislatures; and
3) a variety of external pressures from ordinary citizens and the press
which influence processes of policy choice and implementation within these
different kinds of institutions. Because we can range rather broadly over
the institutions and kinds of actions in the governmental process, we can
provide students with both selected pieces and summaries of political
science and sociological knowledge. In effect, we can work somewhat self-
consciously and explicitly to build up their intuitions about the medium in
which they will be trying to work

Third, to a great extent, the criterion of policy relevance is one that should be extremely congenial to our students. The criterion is exactly the criterion that is appropriate for policy analysts and program designers to adopt in considering political and bureaucratic processes. By virtue of their professional position, they are responsible for a given substantive area and are expected to frame proposals that will be plausibly effective in handling a given substantive problem, plausibe for adoption, and feasible to implement. Thus, the analyst's need to understand political and bureaucratic processes can be usefully directed and circumscribed by the criterion of policy relevance. Similarly, since ordinary people think of the government as being in the business of solving particular substantive problems and wonder why it so often fails, the basic logic of beginning with a substantive problem and exploring the sources of government failure has some significant motivational value.

For all these reasons, then, it is useful to begin analyzing political and bureaucratic processes in terms of the criterion of "policy relevance."

E. Public Policy and the Criteria of Position Relevance

Public Policy 260 (given as a two semester course meeting in the Spring) is organized around the criterion of "position relevance." In each case, we begin not with a substantive problem or policy, but with a person in a job with a set of responsibilities cutting across issues, enmeshed in a setting that will move over time, and with a set of actions he might take on behalf of sets of substantive objectives or more aesthetically defined "goals." The shift to this criterion of position relevance changes the definition of the analytic problem to be resolved in considering political and bureaucratic processes in several different ways.

First, the definition of desired outcomes and governmental outputs becomes much more general and less concrete. To some extent, one stops thinking in terms of a well defined "desired outcome," and a corresponding, logically impled set of "operational requirements" for governmental performance. Instead, one thinks of broad objectives that have almost an aesthetic character. Basically there are two reasons why this change takes place. The first reason is simply that the position will often involve a broad set of responsibilities. It is almost impossible to capture all the things the person might be responsible for in his position with a precisely defined desired outcome. The second reason this shift occurs is because it is very difficult for actors in given positions to control their own agenda. Issues will be forced on them which appear irrelevant to their initial idea about their responsibilities, and new, unanticipated opportunities for action that will appear. To accommodate and exploit these "surprises," it is valuable to have somewhat broader view of your responsibilities and possibilities.

Second, the position turns out to involve one in a complex set of relationships with other actors - many of which will exist over time and across different substantive issues. These interdependencies will distribute differential opportunities for influencing and constraining other players. Over time, one can alter the basic terms of these relationships - selectively enlarging the possibilities for aciton in given areas. Because position (as a resource) is important across virtually all substantive issues, the management of position itself will become as important as any particular substantive issue. Thus, effects of given actions on the general strength of a person's position becomes an important consideration in the analyses of possible actions.

Third, because objectives are now broadly defined and position is itself an important part of the calculation, it becomes possible to trade-off among substantive issues. In fact, this trading becomes a major vehicle for influencing the process.

Fourth, because one will be in a position over a long period of time and has many different issues to handle, and because exogenous factors are constantly altering the political and bureaucratic setting, it may make sense to wait for favorable opportunities to appear in the setting rather than working hard to transform the setting with a limited stock of powerful resources. Instead of always trying to manhandle the setting with the resources of his own position, one might simply wait until things are arranged to allow an effective, inexpensive intervention. Thus, the calculation must allow for this possibility.

Fifth, because one is in a position contemplating action on behalf of some substantive objective, the issue of tactics and the properties of intervention instruments arises quite powerfully. We need to become acquainted with the set of tools for influencing the processes and what we know of their power and effects.

Sixth, and finally, because one is in a given position and thinking about particular actions to take, some pieces of the political and bureaucratic processes come into much sharper, more detailed focus, and other pieces are relegated to the status of black boxes. One sees what is close to one's position very precisely, and what is further away very crudely. Thus, instead of distributing our attention evenly over the whole process affecting governmental performance in a given area, our attention is more sharply focussed on those things that are within reach.

Thus, the political and bureaucratic process looks quite different when one uses the criteria of "position relevance" rather than "policy relevance." Of course, we assume that the underlying empirical reality

of the processes is the same and unaffected by the position we adopt. But, when we come to the problem of trying to make observations and judgments about the process for different professional purposes, the particular things we examine closely and the particular judgments we need to make change in significant ways. Thus, our analytic approach to political and bureaucratic processes depends partly on developing a good sense for the general underlying empirical process, and partly on teaching people how to use that general sense selectively in executing particular professional assignments. To see how this looks in practice, it is useful to examine the detailed structures of the two courses.

E.   The Detailed Structure of Public Policy 240: Political and Bureaucratic Analysis

Public Policy 240 begins with the Massachusetts Medical School Case. The case considers a situation where the Governor of Massachusetts is about to decide whether to continue with the construction of a medical school in Massachusetts. To inform this decision, he hires a policy analyst to compare the value of the Mass. Medical School with alternative government policies directed at the narrow goal of increasing the number of physicians in Mass. The analyst shows that the Mass. Med. School proposal is a bad alternative. The students, in the role of staff assistants to the Lieutenant Governor, are asked to recommend a specific course of action for the Governor to follow. The students generally recommend that the Mass. Med. School not be built. They are then told that the School was built and turned out to be an even greater disaster than anticipated. This allows us to ask the following questions: Why was the Mass. Med. School built? Who in the case did not do their job? How should the various participants in the process have used analyses of political and bureaucratic processes to do their jobs better? The case is an excellent introduction because it shows the power of governmental processes to crush "good arguments" on the way to disasters, introduces

the students to a variety of professional roles, and makes the point
that people in the diverse professional roles would be significantly
more effective if they were prepared to make serious calculations about
the real character of political and bureaucratic processes.

Having gotten the students' attention, we then turn quickly to
teaching them how to analyze governmental processes in terms that
are more disaggregated and concrete than the terms they have previously
used. The routine intellectual assignment is to "Explain" specific
governmental actions that are presented in a given case. The intellectual
concepts we use are the logic of mapping backwards, and the conceptual
models developed by Allison, Steinbruner, and Moore to understand the
behavior of different kinds of governmental units, and different
mechanisms which will aggregate the interests and capabilities of
the different units into a policy as chosen and implemented.

The cases are chosen to highlight specific concepts and predictions
presented by the models. In addition, the summary models are embellished
by additional theoretical material that gives a more detailed account
of the processes that lie behind the summary models, or include concepts
not included in current versions of the models. By mid-November, the
students are expected to be skilled in describing the outputs of a gov-
ernment, and in providing a detailed account of why that particular output
was the result of both the initial interests and capabilities of units
affecting the output, and the process that aggregated these interests
and capabilities to a policy result. To test these capabilities, we give
them a mid-term examination which requires them to explain an observed
state of governmental nutrition programs in 1969. This case requires
them not only to use concepts from all the models, but also to learn

and notice significant facts about major institutions of the government, and to track they dynamics of a developing policy issue. As such, it is an excellent culmination of the "Explanation" section of the course.

Following Thanksgiving, we leave the problem of "Explanation" (hoping it will have served the purpose of equipping students to dis-aggregate and explore governmental processes with greater scope, detail and subtlely than when they began), and turn to the problem of "Prediction." Prediction is a more complicated and interesting problem than explanation for two different reasons. First, in making predictions, one is forced to consider the relative importance of the various factors he examines. In explanation, one can "cheat" by simply listing different factors that contributed to a result without necessarily having to say which of the factors was relatively more important. Thus, "Prediction" depends on a more difficult calculation.

Second, real world professional assignments exist which depend significantly on an analyst's ability to predict the behavior of govern-mental units. One such assignment is "foreign assessment:" the problem of anticipating the actions of other governmental units with whom one must co-operate, but cannot easily influence. One thinks of this assignment as being most common in the area of foreign policy where one sovereign government tries to anticipate the actions of others. But reflection suggests that the analytic problem crops up frequently in domestic policy as well. It is often crucial for one federal department (say the Drug Enforcement Administration) to predict the behavior of another federal department (say the U.S. Customs Service) and adapt to that anticipated behavior in a way that maximizes the value of their combined efforts. Similarly, in a world of "federalism," it is often

very important for the federal government to anticipate the behavior of
50 state governments and hundreds of local governments in coping with
a given problem to determine what kind of federal effort will be required.
Thus, both interdepartmental and intergovernmental relations within
the U.S. government may require effective "foreign assessment."

A second assignment involves incorporating predictions about the
likely behavior of governmental institutions into the process of
formulating and evaluating substantive policy proposals. We call this
assignment "implementation analysis," "feasibility estimates," or "program
design." The basic notion is that a policy analyst might be expected to
predict how the government is really likely to behave in carrying out a given
policy, and/or to consider whether it is conceivable that the policy would be
adopted. Moreover, if the analyst focussed his attention on the potential of
the existing institutional setting in a given policy area, his observations
might suggest useful avenues of action that he had not previously considered,
or provide useful clues about what values are crucially important to partici-
pants in the process. In any event, the business of proposing policies to
handle particular substantive problems can be usefully supported by an ability
to predict how the particular politican and bureaucratic processes will handle
alternative proposals.

Thus, "Prediction" (and the two professional assignments associated
with the intellectual skill) is a natural follow-on to the work on
"Explanation." Public Policy 240 concludes with cases that involve
"program design" or "implementation analysis." Concluding on this type
of case presents a perfect foil to the Mass. Med. School case with which
the term began: the students can compare their ability to do policy
analysis that accommodates a sense for real political and bureaucratic
processes with the capabilities of the analyst in the Mass. Med. Case and
discover how much more sophisticated they have become.

In sum, the major objective of PP 240 are to force students to relin-
quish somewhat sloppy intellectual habits in describing and analyzing
governmental processes, to instruct them in what political scientists
and sociologists know about the behavior of decision-making groups and
organizations, to give them practice in applying the theories in
specific instances, and to acquaint them with some major institutions
of government in the U.S. As such, PP 240 equips the students to
perform two interesting professional roles (e.g., foreign assessment
and implementation analysis), and prepares them to do the detailed diagnoses
of political and bureaucratic settings that will inform calculations about how
to exploit given positions that they will see in Public Policy 260 in the Spring.

F. The Detailed Structure of Public Policy 260

The key objective of Public Policy 260 is to teach students to make
a calculation about how to make the most out of a given position over
time across a variety of substantive issues. As such, it is organized
exclusively around the criterion of position relevance. The course
differs from Public Policy 240 in that students are now expected to
intervene in the process to alter the shape of the probability dis-
tribution over conceivable government actions within their purview.

Of course, it is not very interesting (and may be somewhat dangerous)
to think about influencing political and bureaucratic processes without
serious attention to both the substantive objectives that are being pursued,
and the ethical issues that surround efforts to influence political and
bureaucratic processes. Consequently, the discussion of strategies to
influence the process must be set in a context where both these elements
are present in the students' calculations.

To a great extent, PP 240 attunes students to thinking of what substantive results are at stake in the decisions and actions of the government. That is the force of PP 240's pre-occupation with outcomes, and a major reason that PP 240 begins and ends with cases where the collison between governmental processes and the requirements of effective policy are highlighted. Consequently, to the extent that the process of "backward mapping" taught in PP 240 meshes with the students' own strong motivations to design effective policy, we can count on our students to approach the problem of influencing governmental processes with a strong substantive orientation.

At the time PP 260 begins, however, we can count less on the students having a full appreciation of the ethical considerations that should influence judgments about how to intervene and influence the processes of government deliberation. Consequently, PP 260 begins with four weeks on ethical issues which face public officials. The four weeks are allocated to the following topics: 1) The Problem of "Dirty Hands" (i.e. why public officials cannot always behave consistently with common ethical precepts and the difficulty of distinguishing real justification for breaking these rules from mere rationalization); 2) The Problem of Valuing Consequences of Policy Choices (i.e. limitations of welfare economics and alternative conceptions of the role of the state); 3) The Problem of Suitable Processes for Making Policy Choices (i.e. concepts of due process, democratic representation, and the role of expertise); and 4) The Role of Personal Interests and Obligations in Shaping Official Conduct (i.e. what one owes to personal and professional intimates in making public policy choices). While these topics are far too difficult to explore adequately in the time available, the discussion should serve to sensitize students to these issues in later analyses of political and bureaucratic processes.

Thus, the combination of the outcome orientation of PP 240, and the short introduction to the ethics of public service should insure that students approach the issue of influencing governmental processes with a suitable perspective: one that orients them to substantive results and is disciplined by ethical sensitivities.

Following the section on Ethics, PP 260 is divided into three different components. One component is concerned with "advocacy." A second component is concerned with "administration." The culminating component is concerned with "public managment", and the concept of "institutional strategy."

The cases within the "advocacy" component are held together by two different threads. First, in all the cases, the important output of the government is simply an authoritative decision. No great problems of implementation through a governmental agency are involved. Second, in all the cases, the tactical problems are to influence peers and superiors rather than subordinates. As a result, the cases illustrate the common tactics for influencing peers (e.g., bargaining, persuasion, monopolozing information, framing proposals to take advantage of peoples' beliefs, timing proposals to take advantage of new opportunities for processing proposals, etc.). Within this component, the sequence of cases is determined by movements along the following dimensions: 1) "position" (e.g. from legislative, to executive, to "outsider"); 2) "setting" (e.g., from favorable without active efforts by the player to unfavorable requiring a significant investment by the player to transform the character of the setting); and 3) the "scope" of the output that is the goal of the player (e.g., from a narrow choice in a specific situation to a broad transformation of the future possibilities of government action). In addition, we would like to consider the distinctive role of courts as a source of authoritative

decisions that follow much different rules than the executive/leg-
islative processes that form the bulk of the advocacy section.

The cases within the "administrative" component are also held
together by two different threads. First, all the cases are concerned
with situations where the important outputs of government are the
actions of large numbers of government employees in a specific organ-
ization. Nearly the entire problem is implementation. Second, in
all cases, the tactical problem involves influencing large numbers of
subordinates. Consequently, the cases illustrate the properties of
common administrative instruments such as organizational structure,
budgeting systems, information systems, personnel systems, and
leadership. Within this component, the sequence of cases is given
by the list of common instruments for influencing subordinates, and
by the complexity of the desired outputs.

The component on "public managment" involves cases where both
effective advocacy and effective administration are required. As such,
this section represents a culmination of the entire PP240/260 sequence.
The basic concept we teach here is the concept of "institutional strategy."
It defines an equilibrium for a public organization as a position where
goals (or objectives) are consistent with both external sources of authority
and resources, and with the internal inclinations and capabilities of one's
own organization. In general, several such equilibrium positions may be
available to a public organization. The problem of the public manager is to
conceive of these equilibrium positions, evaluate the substantive value of
different equilibrium positions, and to see how actions he might take can
alter the setting and move his organization to the desired position. In
this calculation, the student must use the "program design" skills he learned
in Public Policy 240, and the advocacy and administrative skills he learned

in Public Policy 260, all in a context where many issues will be handled
over time. This task presents the most difficult conceptual challenges,
and corresponds to some of the most common and most important positions
in the public sector. It will also reveal what is distinctive about the
problem of trying to get complicated results from a large organization in
the public sector compared with managing in the private sector.

Thus, by the end of PP 260, students should be prepared to make
sophisticated calculations about how to influence political and bureau-
cratic processes from a variety of positions. They will be able to diagnose
the setting in the light of their objectives, and the resources of their
position. They will be aware of the common tactics and instruments for
exploiting the potential of the setting. And they will consider tactics
with some sensitivity to ethical concerns. If the curriculum is successful,
the students should have accumulated a great deal of "craft knowledge" that
can be put to effective use in a variety of professional assignments.
Moreover, we think they will have developed cognitive habits and insights
that are much more comprehensive and powerful than they could possibly
have accumulated in with experience. In fact, we think that practicing
managers who participate in the curriculum will have their perspectives
and analytic capabilities significantly strengthened.

First, the student's objectives become much broader than the
perspective usually adopted in PP 240. S/he becomes interested in
streams of outcomes in several different policy areas rather than
focusing on a single outcome. S/he considers what her/his personal
stakes are, as well as the social objectives. And s/he thinks about
making investments in the capabilities of her/his own position as
well as securing specific outcomes.

Second,the student analyzes the setting not only in terms of the
factors that are significantly affecting government actions at a given
moment, but also in terms of what factors are within reach of his
particular position, and how all the factors are within reach of his
particular position, and how all the factors are moving over time
in predictable or unpredictable ways. In effect, the analysis of the
"setting" that is the subject of PP 240 is altered by adding dynamics
and by taking account of which factors are within reach of a given position.

Third, the student becomes interested in the characteristics of the
common devices for affecting the government's actions. The devices include
those directed at peers or superiors (e.g., bargaining, persuasion, mono-
polizing information, framing proposals to take advantage of people's
beliefs or different procedures for handling different issues, etc.),
as well as those directed atl large numbers of subordinates (e.g., orders,
changes in organizational structure, changes in personnel systems,
changes in information systems, budget decisions, etc.).

Fourth, the student can be forced to concentrate on the concrete.
tactical steps s/he must take to begin the process of influencing the
actions of the government. The question of "what is action" as opposed
to strategic calculations can be raised directly, and become powerful.

Given these observations, it is apparent that either course
by itself would be inadequate. PP 240 would look too academic,
encourage people to think of the governmental processes as a series
of immovable obstacles, and fail to instruct people about the possibilities
of mobilizing and influencing the process. PP 260 would lack the
substantive orientation to outcomes and the deliberate analyses

of the "settings" that PP 240 makes possible. However, taken together, and in their current sequence, they should equip students to be effective in a variety of professional roles.

ATTACHMENTS: 1. Course Description PP 240
                 2. Schedule PP 240
                 3. Course Description PP 260
                 4. Schedule PP 260