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Educational Planning: Differing Models

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Planning is an almost ubiquitous activity, engaged in by individuals, organizations, communities, and nations. It is pursued for a variety of purposes in a variety of ways, depending on what is being planned, who is doing the planning, and what assumptions are being made about the context and constraints of planning.

There has been relatively little conceptualizing and theorizing directly about the process of educational planning. As with many other educational concerns, the sources of theoretical insight frequently lie in the behavioral and social sciences. Most models pertaining to planning and policy-making have their disciplinary roots in sociology, economics, political science, psychology, or the synthetic administrative sciences (Friedman and Hudson 1974). Empirical studies in support or explication of such models tend to be found in business or public affairs rather than in education.

Classifying and distinguishing between models of planning are hindered by the lack of agreement on definition. Thus, in the literature, what one author calls a planning model may be labeled policy-making, management, decision-making, or merely politics by other authors. Much of the confusion is perhaps an inevitable result of the complexities of social organization and decision processes and the inadequacies of the languages of the social sciences. Policymakers may evolve strategies (plans) while planners, in certain contexts, may determine goals (policies) and decide who should "get what, when, and how" (Adams 1988).

This entry offers a classification of overlapping sets of interactive and rational models of the educational planning process, and explores their paradigmatic context. Comparison is made of technicist, political, and consensual models along a number of dimensions and attention is given to the utility and limitations of the different models by providing international examples of educational planning in practice.

Models of the Educational Planning Process

In the broad spectrum of planning literature, several relatively distinct definitions of planning compete for attention. Planning may be viewed as

(a) a process of making rational/technical choice;
(b) a process of making incremental changes;
(c) a matrix of interdependent and sequential series of systematically related decisions;
(d) the construction of maps of time, space, and causality in new settings;
(e) a strategy of decision-making controlled by politics and the exercise of power;
(f) interaction and transaction with decisions reached as the result of dialogue;
(g) a process of education or social learning.

Even such a partial list illustrates the variety of disciplinary perspectives and the wide range of assumptions held about planning. The difficulties in grouping such a variety of definitions into a typology of descriptive models of the educational planning process become readily apparent. Clearly, different purposes, actors, and techniques are implied suggesting that the definitions are embedded in contrasting theories. The cited definitions and the general planning literature, however, roughly fall into two broad conceptualizations of planning which may be labeled "interactive" and "rational."

Figure 1 depicts an axis whose ends are labeled "objective" and "subjective" in order to illustrate the two basic social paradigms of planning (Burrell and Morgan 1979). The paradigms are distinguished by their contrasting views of knowledge and science. The objective paradigm incorporates the positivistic assumptions of a value-free social and physical science, in which the scientist is outside the orderly world being examined. In contrast, the subjective paradigm has, at its core, the notion that individuals create the world in which they live, and that any understanding of society, its institutions, and its emergent social processes, depends on the vantage point of the participant. The distinctions implied by location along an objective-subjective dimension

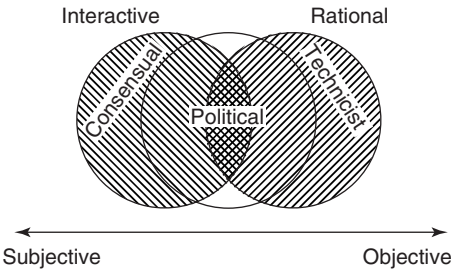

Figure 1 Models of educational planning.

T0001 **Table 1** Comparisons of three sets of models of educational planning

	Technicist	*Political*	*Consensual*
Assumption re: Decision-making	Algorithm	Bargaining, trade-offs	Transactional
Ontology	Objective	Mixed-objective/subjective	Subjective
Systems	Hard	Soft	Soft-interpersonal
Metaphor	Machine-cybernetic system	Debate	Social learning
Organizational concepts	One set of goals Expert driven Research based data	Multiple goals Interest group advocacy driven Interest and data based	Emergent, multiple goals Wide participation Shared understanding
Criterion for choice of policy or plan	Optimal/satisficing	Bargaining resultant	Meaningful dialogue
Implementation strategies	Competent enforcement	Bargaining/exercise of power	Individual and organizational learning
Keys to success	Expert knowledge	Willingness to bargain/control of action	Intersubjective communication
Definition of success	Fidelity with objectives	Political acceptability	Agreement/consensual action

highlight the differences in rational and interactive models of planning.

P0075 Considering planning models within the context of the two paradigms facilitates comparison and reveals contradictions of assumptions basic to the social constructs and commitments of the planner insights that are requisite for building planning theory and understanding planning practice. The planning model chosen dictates, to a large extent, the rules of the game in making planning decisions. The images of social processes implied by the planning model may be neither readily apparent nor easily described, but they are nevertheless crucial in giving meaning to the activity of planning.

P0080 The rational models emphasize planning as a series of analyses of means to achieve given or derivable goals. Key assumptions of these models include the following:

P0085 (a) The knowledge necessary for planning is objective, cumulative, and capable of being expressed in codified, abstract language.

P0090 (b) Planning with its flow charts, workforce matrices, cost–benefit formulas, and engineering language suggests that a neutral, scientific process is available which provides an algorithm for responsive, efficient change.

P0095 (c) Planning models and methods have universal applicability or at least require little situational adaptation.

P0100 In contrast with rational models of planning, interactive models describe an approach which is less systematic, more participatory, and more adaptive. Approaches that are described in the literature as "political," "transactive," "advocacy," and "learning-adaptive" typically give recognition to the value of the interchange of opinion and knowledge and fall within the loose grouping of planning models designated here as interactive. Interactive models thus depict the planning process in a much less structured or less predetermined way and emphasize the importance of interpretation of practice, the meaning of information exchange, and the dynamic nature of the interaction of individuals and systems with their environment.

P0105 Each of the broad categories, "interactive" and "rational," includes a number of planning models and approaches. In order to (a) further sharpen conceptual distinctions among the range of models and (b) illustrate their operational characteristics in educational decision-making three overlapping sets of models (as indicated in **Figure 1**), which are based on contrasting assumptions, are examined below. The most objectivist version of the rational models has been labeled "technicist." The political model contains both rational and interactive characteristics. For example, planners could attempt to identify political obstacles and supports and treat such as inputs in a technicist model. On the other hand, politics as a dynamic and shifting process of negotiation and exchange invalidates basic assumptions of rational decision-making. The consensual model breaks cleanly from the rational tradition and focuses on the importance of participation and shared practice. Comparisons of the three models are found in **Table 1**.

Technicist Models

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P0110 The most persistently popular rational planning model in educational planning literature and practice has been labeled the "technicist" model. Technicist planning is expert-driven, assumes a linear

process of decision-making, tends to treat the educational system as a "black box," and severely limits the number of variables examined to quantifiable indicators. Technicist models define "implementation" as the execution of a plan as the plan directs. Implementation is thus a stage in a linear process of change, following plan formulation and preceding evaluation. Evaluation results may serve as feedback to modify implementation activities, or as input to future planning, but typically do not serve to alter the plan itself. Success is defined as accomplishment of the plan's objectives. Concern for unintended effects is limited. Success is assumed to be a function of prior planning and specification, the availability of appropriate information, and administrative competence.

P0115 Technicist models of planning, which conceive of implementation as the execution of the plan, are most often adopted by centralized educational systems that employ top-down approaches to change. The emphasis on centralized, hierarchical administrative control is seen as a necessary effort to insure local compliance. Space allocation, physical plant construction, cost analyses, transportation assessments, enrollment forecasting, and teacher supply and demand can, with certain assumed simplifications, be addressed by technicist models within the constraints of technical rationality and optimization.

P0120 The technicist model is perhaps well illustrated in practice in the conceptual and analytic work of a number of international organizations and a small supporting group of social scientists, primarily economists, whose publications shaped the educational planning discourse for the 1960s and 1970s. Even in the 1990s this legacy remains important in the sectoral and program planning efforts of Third World countries which frequently are influenced by the counsels of international consultants. In a more limited way these early technicist models influence the planning of educational change everywhere as planned responses to well-defined educational concerns, and as an ideal to be approached in educational decision-making.

P0125 The Organisation for Economic Co-operation and Development (OECD,) UNESCO (and its affiliate, the International Institute of Educational Planning), the World Bank, and a variety of other governmental, intergovernmental, and academic groups have all contributed extensively to the general literatare, technology, and international popularity of technicist educational planning. The manuals, handbooks, and reports of the international organizations have tended to describe three approaches to educational planning: the workforce approach, the cost-benefit approach and the social demand approach. The first two of these, in particular rest on many of the assumptions of the technicist model.

P0130 From a technical, or perhaps aesthetic, point of view, economists appear to prefer cost-benefit analyses to workforce assessments as an approach to educational planning. However, both of these technicist approaches focus on the external effiency of education, have been widely explored globally, and are still influential in planning decisions, particularly in developing countries. The cost-benefit approach promises to provide the techniques for basing educational choice on the criterion of profitability. It presumes to allow decision-makers to choose on standard investment criteria how much and what kind of education is "best" for either the individual or the society. The workforce approach attempts to disaggregate labor into occupational categories, each of which is assumed to require a particular combination of learned skills. Education is viewed as the major vehicle for the provision of such occupational skills. Both methods have rational appeal in that the overarching educational goal, that is, high investment returns, is relatively clear, the procedures for choice among alternatives are developed, and the process can be directed and monitored by experts. There is, however, little evidence that cost-benefit studies have been widely influential in determining the direction or magnitude of specific educational reforms. Hollister, an economist, in reviewing his considerable research experience in workforce planning concluded in 1983: "It is my impression that the plans made by manpower planners have rarely had any effect on the policy decisions actually made" (Hollister 1983, p. 59).

P0135 The fields of management and administration have also contributed to technicist models of educational planning. Although its history and scope are far from clear, management science includes at minimum a technocratic vision and an empirical underpinning. A number of scholars from the eighteenth century to the present have envisioned society as a technocracy whose major institutions were guided by scientists, social engineers, and other experts using the latest knowledge available. This vision is clearly rational, future oriented, and undiluted by politics. A major example of a planning approach which drew from systems analysis and management science and was treated as having broad applications in educational planning was the Planning Programming Budget System (PPBs). Although there is considerable debate over the historical roots of PPBS, credit for much of its development and early refinement has been given to the work of economists and systems analysts in Rand Corporation and in the United States Department of Defense in the 1950s. Subsequently, various

versions of PPB or PPBS were established in many state and local government offices (including school districts) throughout the United States and in governmental and educational institutions in many countries around the world.

P0140 To the technocratically inclined educational planners and administrators, PPBS represented an opportunity to acquire information on all major educational activities, integrate changes in different educational subsystems, focus attention on outputs rather than inputs, link each program or project explicitly to objectives, and examine the costs and benefits of alternatives being considered. This ambitious technicist vision of educational systems running like clockwork was shattered in actual PPBS practice. Fragments of PPBS persist worldwide into the 1990s but the unique beauty of its completeness and precision has been lost. As early as the 1970s, at a time when PPBS was just being introduced internationally into public bureaucracies, Knezevich (1973) concluded that in the United States "few if any educational institutions have implemented a comprehensive PPB system" (Knezevich 1973, p. 249). He went on to point out that in practice PPBS fails to allow for quick decisions, avoids politics and policy analysis, and ignores the complexity of education. Moreover, PPBS requires much data and therefore may be operationally costly.

P0145 During the 1970s and 1980s planning theorists and practitioners increasingly sought to define some sort of broader systems approach to educational planning which extended the assumptions regarding relevant information and thereby the roles of planners. In these systems approaches technical analyses remained crucially important and planning was still viewed as essentially a linear process; however, the significance of interaction and dialogue received more recognition. The newer models also tended to extend the planning process to include increased concern for implementation and evaluation (*see* Educational Planning, Economics of).

S0015 Political Models

P0150 As shown in **Figure 1**, political models of planning overlap with both rational and consensual models. The set of political models may thus include elements of the rhetoric and technology of all sets of models. Although attempts have been made to separate politics, policy, and planning, in this conceptualization much of educational planning is influenced by political power and ideology. Even technical tasks may not be insulated from politics, and politics and planning may become, in effect, indistinguishable.

P0155 Political models describe educational planning as a process of bargaining, negotiation, and exercise of power. In their purest form, the political models—which view planning as a dynamic, shifting process of interaction and exchange—reject the main assumptions of rational decision-making. This does not, however, suggest that all rational models ignore politics nor all political models ignore rational techniques. Rational planners often attempt to identify political obstacles and supports, treating them as inputs to a technicist planning process. Moreover, politically oriented planners, in identifying planning choices, may welcome the quantitative rigor and legitimacy of apparently objective interpretations.

P0160 Implementation approaches associated with the less authoritarian variants of political planning models, while sharing several features of technicist models, are less concerned with control and more responsive to differing social circumstances and educational contexts (McGinn et al. 1979). The centralized, or high-level, determination of broad goals and means of goal attainment is accompanied by recognition and accommodation of varying local conditions, as well as conflicting interests within and among system components and with external groups. Since bargaining among participants may be continual, planning (including implementation) is adaptive in response to diversity, conflict, and change in planning objectives as well as to shifting power relations. Political models define implementation as movement toward, if not attainment of, evolving objectives. Success is assumed to be a function of ongoing negotiation and trade-offs, not necessarily of prior planning specification.

P0165 Political dimensions to educational planning have gained increased recognition since the 1960s. In the 1960s and 1970s the social demand or demand-for-places approach gave attention to political context. At minimum this model is expected to include educational planning activities which respond to population changes and offer an interpretation of private educational demand. Although the major objective of social demand planning at national and sub-national levels is merely to provide the number and kind of schools and personnel to satisfy the number of students who wish to attend, in practice, this objective is modified to accommodate academic and possibly other standards for school admission and promotion. One advantage of gearing an educational system to the notion of social demand is that the controversy over the priority of social or economic ends for education is avoided as also are many of the difficult technical problems of setting educational targets on the basis of some social or economic criterion. The popularity of the social demand ap-

proach to national educational planning is most associated with the highly industrialized countries. However, it may also be found to a significant degree in several of the newly industrialized countries.

P0170 Educational planning has been viewed by some observers as synonymous with politics broadly defined. Within this view planned decisions are nothing more than political resultants. Even if alternative educational futures are quantifiable and optimum educational investments are specifiable, such quantification takes on meaning only within the context of political competition, conflict, and exercise of power. This view of educational planning as a political process, moreover, holds for a range of paradigms. The venerable functionalist conceptualization of the political system as the developer of public policy described by Easton (1957) has been adopted many times to analyze educational change. Other scholars might agree that the planning of educational change is a political process but they probably would reject the Easton model as misleading because its "systems analysis" ignores the fundamental importance of power relationships. Such avoidance, they would argue, leads to a rationalization of the status quo rather than allowing significant dialogue which might result in meaningful change.

P0175 Perhaps the most dramatic national examples of the explicit politicalization of planning educational change comes from such revolutionary systems as China and Cuba. In these countries educational planning was expected to redefine the theory and practice of education and design educational experiences to help create the new socialist individual and the new socialist society. The planning of education in Cuba and China has thus gone well beyond adjustments in enrollments or tinkering with curriculum toward attempting to use the educational system as an explicit instrument to produce a population with an explicit set of new values and commitments (Carnoy and Samoff 1990).

S0020 Consensual Models

P0180 Like political models, consensual models recognize education as an open human system located in a social environment too indefinite and inconstant to allow easy generalizations. Underlying these models, however, are assumptions that meaningful action presupposes understanding and that legitimate action presupposes agreement. Meaning thus evolves from social interaction and is grounded in practice (Friedmann 1984). The choices and decisions which structure significant educational change rest on the accepted relevance of such change by people directly involved in, or thinking about, education. Communication, not political power, pluralistic bargaining, or expert knowledge, is the fundamental key to keeping the planning process moving. Initial goals are not permanent benchmarks; rather, goals suggest directions to be discussed, modified, or replaced over time. The consensual model then bears resemblance to the learning-adaptive model, the transactive model, the social learning model, and the situational planning model. The set of consensual models clearly overlaps with political models and shares with these models their emphasis on negotiated agreement. However, the purer consensual models give more recognition to the particular context, actors, and temporal setting of planning actions.

P0185 There are perhaps no pure examples of consensual models of educational planning in practice. There are, however, examples of (a) structured attempts to maximize participation, communication, and agreement on particular issues or sets of decisions in the educational planning process, and (b) the breakdown and failure of planning due to miscommunication or inadequate levels of agreement among relevant actors. Such cases may be found throughout the world but are most commonly associated with decentralized patterns of educational control and administration.

P0190 Two United States cases of planning educational change illustrate aspects of a consensual approach to planning. The Teacher Corps Program was a federally funded and initiated demonstration program whose objectives were to improve staff development and school climate in schools serving children from low-income families. Federal guidelines placed heavy emphasis on a collaborative planning process which included local definition of project objectives and activities within a framework of externally defined broad goals. The planning of projects under this program typically involved six overlapping stages: (a) assembling stakeholders (including parents, teachers, administrators); (b) brainstorming ideas, problems, and possible solutions; (c) assessing needs; (d) stating objectives; (e) negotiating priorities; and (f) adjusting objectives and priorities to accommodate unanticipated events and operational activities (Beers et al. 1982).

P0195 The case of locally initiated changes to move from traditional to open classroom teaching (OCT) in elementary school programs in the United States provides another illustration of aspects of consensual approaches to planning. Sussman (1977) reports on the case of "Southside Elementary," a racially and socioeconomically heterogeneous school in a major metropolitan area, where the move toward OCT was initiated by a parent who had seen open classrooms

at another school. Sussman's account emphasizes the difficulties in gaining consensus and sustaining grass roots change efforts in the face of changing conditions and conflicting interests and pressures.

P0200 In contrast with the case of Teacher Corps, the educational change represented by OCT was conceived at the local level. However, as Sussman reports, far from being an open democracy the process of planning educational change was dominated by a faction which controlled the direction of change. The practice of politics won over the activities of consensus building and one coalition's advantage was reinforced by the technical knowledge of external experts and perhaps the power associated with their status.

P0205 A major if implicit theme in Sussman's account is how unequal power relations can undermine consensual approaches to planning educational change. Consensual planning implies seeking agreement among peers. In planning for both the Teacher Corps Program and for OCT, differences among and between teachers and parents, which also involved teachers' unions and school committees, resulted in cleavages rather than consensus. These cases strongly suggest the complexity and fragility of efforts to bring about major changes in educational practice by consensual or other means.

P0210 The consensual model suggests that meaningful involvement in planning educational change requires information, skills, and a context where involvement is respected. Engaging in dialogue, participation in mutual learning, and building consensus themselves require knowledge, training, and experience. Success in a consensual approach to educational planning results where professionals and citizens together remove the barriers and promote the conditions of communication and exchange and become one group in commitment to a decision process.

S0025 ## Summary

P0215 The technicist version of rational models of planning with its conceptualization of decision-making as an algorithmic process and its link to a functionalist view of social reality is increasingly viewed as having relevance to a limited number of educational problems. However, if a broad view of rational models is taken, their utility and pertinence to selected educational planning questions can be defended. Questions of space allocation, physical plant construction, cost analyses, transportation assessments, enrollment forecasting, and so forth, can, with certain assumptions, be forced into a form congruent with the constraints of technical rationality and optimization. Further, political and other features of the context of educational planning may be "factored in," allowing an essentially rational process to proceed.

Educational questions pertaining to goals, needs, P0220 equity, and quality, however, usually must be associated with "soft" systems thinking and its interpretivist overtones. All comprehensive planning and much strategic planning fall within this category. Most educational policy planning, curriculum planning, and even resource planning have subjectivist characteristics.

Rational models of educational planning are most P0225 appropriate where there exists strong consensus on the nature of the problem or situation. Interactive models of educational planning allow multiple interpretations of phenomena or problems and yet hold out the possibility of eventual consensus. In practice multiple models may be needed to address the different facets of a given problem. The introduction of a major curriculum change may become, for example: (a) a technical problem of resource allocation; (b) a moral or religious, consensual issue over questions of content; (c) a political problem because of demands on teachers' time and autonomy; or (d) recognized as including all of these problems. Moreover, each of these interpretations may be rooted in a particular temporal and cultural context.

Advancement in the theory and practice of educa- P0230 tional planning requires going beyond the assumptions of externally imposed inflexible models to capture the pertinent knowledge embedded in educational practice and uncover the choices and decisions which structure significant change. These understandings in turn depend on recognition of ideological commitments, interpretation of shared meanings, and identification of rules which govern people's behavior and communication. The focus on the significance of insights to be found in practice and human context clearly emerges as a major way in which the subjectivist paradigm enriches models of educational planning.

See also: Educational Planning: Models and Methods; Politics of Educational Planning.

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