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ABSTRACT

This paper is designed to help educational leaders improve their decision making strategies (and correspondingly educational practice) by evaluating their own strategy in concert with a model proposed in the paper. The proposed model provides educational leaders with an enhanced context within which one can effectively analyze and evaluate policies and procedures, critical issues, and decision making processes, and determine educational practices that will result in more effective schools. The model serves as a framework for analysis and evaluation and includes the following components: (1) the foundations of education (historical, philosophical, sociological, political and organizational) and how these perspectives should be considered in the decision making process and their relationship to administrative behavior and the decision setting; (2) the functions of management and their role in the decision making process; (3) the implications of policy development related to the decision and the policy's ensuing procedures with emphasis on the appropriate level of policy/procedure development and how a policy can be integrated into the life of an organization; and (4) the use of the attributes/findings of the more effective schools research as a criterion for analyzing, evaluating and implementing policies and procedures to carry out the decision. (Author/DF)

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A MODEL FOR IMPROVED EDUCATIONAL DECISION MAKING

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**A MODEL FOR IMPROVED
EDUCATIONAL DECISION MAKING**

There is little point in general models if they do not give rise to specific conceptual derivations and empirical applications which illuminate, in however modest a degree, significant day-to-day practices¹

In the above words of Jacob Getzels, he admonished us some years ago on the need for relevance in paradigm development. With this caution in mind, this session is designed to help educational leaders improve their decision-making strategies (and correspondingly educational practice) by evaluating their own strategy in concert with a model proposed in the session. The proposed model is designed to provide educational leaders with an enhanced context within which one can effectively analyze and evaluate critical issues, policies and procedures, decision-making processes, and determine educational practices that will result in more effective schools. Certainly, the proposed model is not a panacea. Rather, it is a framework for analysis to help us get from where we are to where we want to go.

So often, it seems that major policy decisions at all levels are made without the benefit of serious contemplation and reflection, without the knowledge or understanding of applicable research, and without appreciation or recognition of second, third and fourth level implications and impact of the decision. Effective decision-making is a time consuming task! We know from

research that the quality of administrative decisions and actions can be directly correlated with the amount of time spent in preparing and implementing a decision. Peter F. Drucker has proposed two basic kinds of decision-making -- generic and unique.² Generic decisions are those which normally can be handled routinely through the application of existing policies and procedures. Generic decisions normally involve little risk taking. These characteristics should not be interpreted as presenting generic decisions as unimportant; rather they provide a gauge by which the administrator can allocate time and resources to the decision.

Unique decisions, on the other hand, are decisions that require thought and action beyond that which is already established or approved and often times involve considerable risk. In unique decision-making settings, the administrator is asked to exercise his or her judgment in developing a wide variety of alternatives and evaluating the potential costs, implications and results of those alternatives. Hoy and Miskel have pointed out that

completely unique events are rare; nevertheless, the distinction between problems that are routine and those that are unique is an important one in terms of decision making. Two common mistakes administrators need to guard against are (1) treating a routine situation as if it were a series of unique events and (2) treating a new event as if it were just another old problem to which old procedures should be applied.³

The determination of the kind of decision -- generic or unique --

that needs to be made is an important first step. Depending on the nature of the decision, obviously different strategies and intensity of attention will be focused on the elements of the decision-making process.

As a point of reference in considering the model that will be presented, I would like to ask each of you to consider those strategies and variables you employ in your own decision-making process. (Ask for individual identification of decision-making strategies and the variables that are considered and record them on overhead transparencies.)

While these responses have been necessarily general, stimulating our thinking, introspection and analysis of our decision making strategies is a luxury in which we do not often engage. However, this reflection should provide a good reference point for us as we look at a model that is designed to encourage educational leaders to analyze, evaluate and synthesize components involved in educational decision making at a proactive level that goes beyond the typical time-constrained and short-sighted reactive process that often results in ill-conceived policies and procedures for effective educational practice.

Figure 1 outlines a conceptual model for improved educational decision making. The seven elongated components of the model (issue definition, preliminary course(s) of action, data analysis, issue definition refined, course(s) of action refined/selected, decision implementation/educational practices, decision review analysis) represent decision-making process

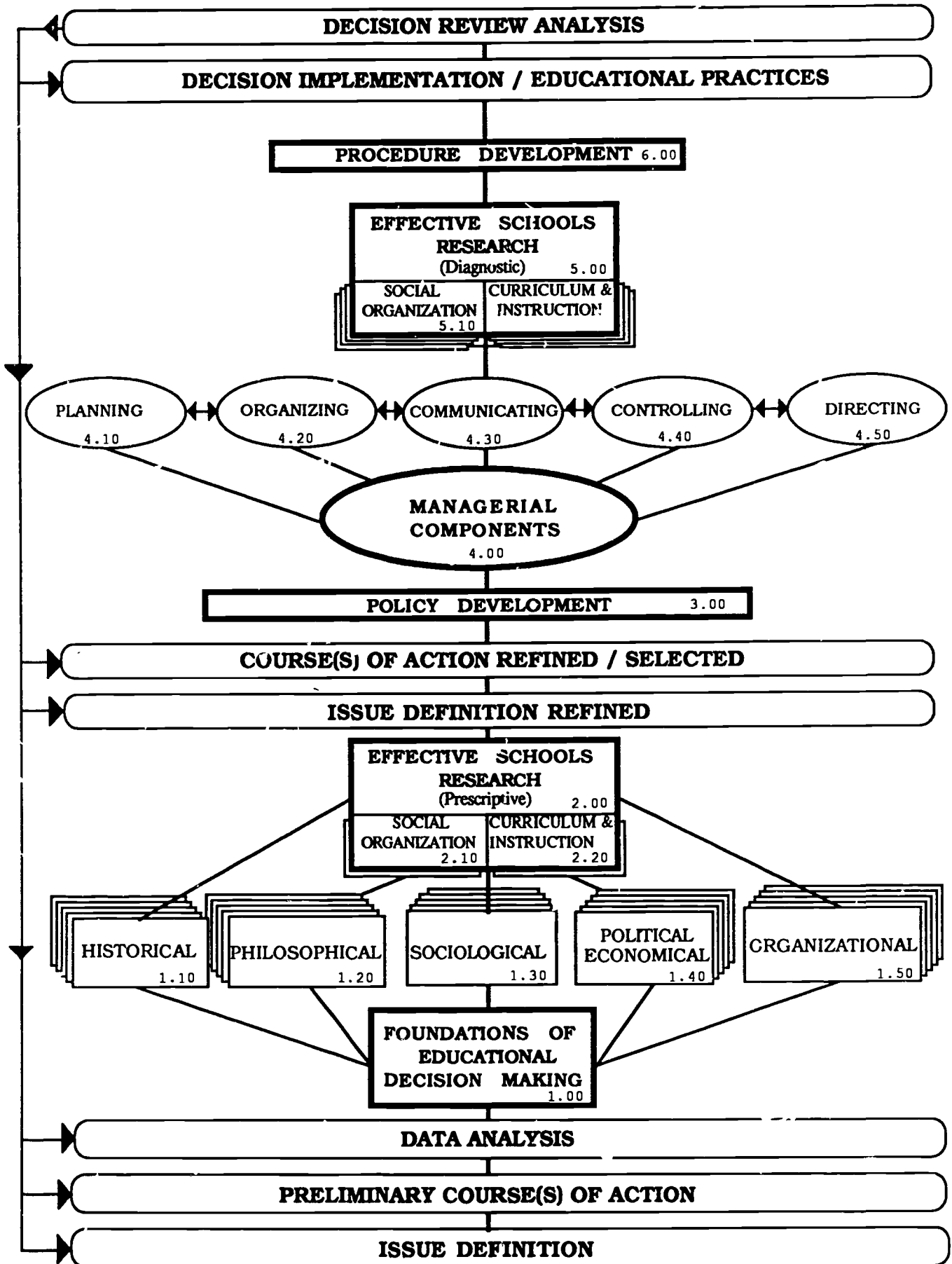


Figure 1. A Model for Improved Educational Decision Making

steps. Certainly, there are many models for decision making that could be used, and I encourage you to apply the particular model and flow that works best for you or for the situation/issue under analysis. This particular flow has been formulated because of its compatibility with the other components of the model and because of its generalizability to a wide variety of settings. We will not dwell on these process steps as they are well documented in the literature. Rather, we will touch upon them to ensure that each step is considered and that continuity is maintained as we work through the model.

Issue Definition

The model is entered by defining the issue about which a decision needs to be made. This is obviously a very critical step for how the issue is defined will drive the remainder of the process. Once the issue has been defined, then preliminary course(s) of action can be established as to how initially to address the issue. These preliminary courses of action are intended to help the administrator formulate the context and scope of the decision under consideration. This step should require considerable time and effort so as not to restrict the decision maker conceptually or practically and to insure open-mindedness and a comprehensive range of options.

Data Analysis

The data analysis step includes data collection, organization of data and data analysis. Emphasis in this model is placed on data that is derived from the foundations of

education -- historical, philosophical, sociological, political/economical, and organizational. Analyzing, in depth, the foundations of education as they relate to a particular decision setting develops a proactive approach to decision making, rather than reactive, where we as educators are normally responding to the forces that evolve out of these because we have not understood or attended to their implications up front. This is one of the central points of the model! If we understand and infuse the foundations of education into our decision making, then we can be educational leaders proactively effecting educational change as professionals, rather than reacting to the uninformed perceptions of legislators, boards of education and other societal forces. By employing an in-depth analysis of the foundations impacting a decision, we will know what will work, why it will work and how to implement it.

What aspects of educational foundations should be considered? Figure 2 delineates those components within each foundational area that should be analyzed in refining the definition of the issue in question and the course(s) of action considered and selected. Central to this analysis is what I will refer to as 2nd, 3rd, and 4th level decision impact effects. This refers to identifying and evaluating the potential impact of a policy decision beyond the obvious (which is where we usually stop). Second, third and fourth level decision impact effects would consider such questions as: What are the peripheral implications? What are the hidden costs? Is this a short-term

FOUNDATIONS OF EDUCATIONAL DECISION MAKING

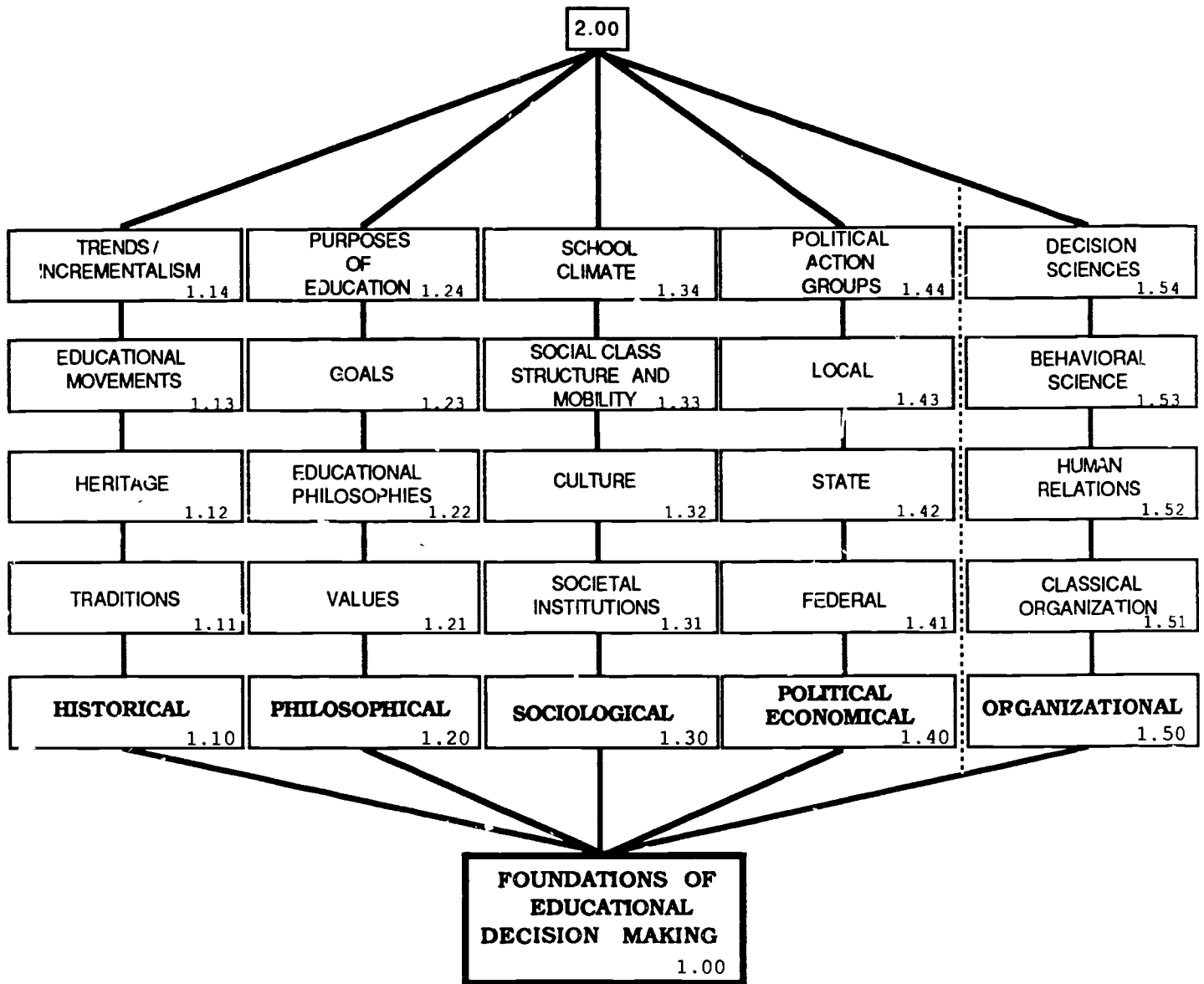


Figure 2. Foundations of Educational Decision Making

fix to a long-range problem? What are the implications for staffing or professional development? Will the proposed solution create more problems than it solves? Who will benefit? Who will lose? Is the course of action educationally sound? . . . and on and on. By addressing the educational foundations adequately as a part of our decision process, we can answer these and other relevant questions.

Within each of the foundational areas (Figure 2), descriptors are identified to elicit from the analysis factors in each of the areas that should be considered in making the decision or that may potentially impact the effectiveness of the decision. For example, historical considerations should include an analysis of community traditions, heritage, relevant educational movements and an assessment of trends and factionalism. One should be sensitive to incrementalism from others as a way of minimizing conflict thus avoiding facing critical issues head on. In the historical area, are there customs or practices in the community which would be violated if a particular course of action is selected? Does the proposed solution have a sound historical base or is it a fragmented response to a short-term special interest group? What approaches have been successful in the past to similar issues? What approaches have failed? Philosophically, one must consider values, attitudes, beliefs and mores. Correspondingly, existing educational philosophies, community goals, and desired purposes of education are all critical components in effecting educational

change. What are the attitudes and beliefs of the professional educational community relevant to the issue under study? Is the purpose of the proposed alternative consistent with the philosophy of the district? Can the concomitant policies be effectively inculcated into the culture of the organization?

Sociologically, what are the relevant influences from societal institutions; what cultural considerations need to be addressed; are the courses of action under consideration fair and equitable and do they provide equal opportunity and benefits for all social classes; what impact will the school climate have on the decision; what impact will the decision have on the school climate? What are the social systems that are at work and how can their support be nurtured in implementing the decision? Does the proposed solution focus on satisfying society's perceived needs for the school or does it attend to the actual needs of the students and the society of the school itself?

Politically, where does the power lie to support this alternative? Where does the opposition lie? What are the political realities that are operating with respect to this particular issue? What community, state and/or federal influences will be exerted on the policies of this decision? What are the politics of the profession? Of the organizational bureaucracy? What role will the media play? What political action groups are at work? How representative are they of the community at large and are their motives educationally sound and in the best interests of the students?

Economically, what are the short and long term costs? Who will pay? Is it cost effective? Can we afford it? Do we need it? What support can be expected from the local business/industrial base? Are there out-of-the-ordinary costs that need to be considered?

Organizationally, what do we know from administrative theory and management science that supports/refutes this course of action? How can potential conflict be resolved? What is the compatibility between organizational goals and individual needs? Where are the risks and do the potential benefits justify taking the risks? Can the organization support the decision?

While these few pointed questions reflect only a sampling of the kinds of issues that should be raised, it should be recognized that this is one of the most critical steps in improving one's decision-making process. Indeed, developing one's ability to ask the right questions and to probe the decision environment separates the proactive effective decision makers from the reactive "yes man."

Within the data analysis step, this model for improved educational decision making incorporates a serious research based prescriptive criterion that is closely coupled with the analysis of the foundations of educational decision making. By initially introducing at this point the standards by which the results of the decision will be assessed, establishes relevant goals and objectives to which the remaining work can be directed. Drawing upon the effective schools research, the attributes of effective

schools can be used to assess the foundations analysis and to evaluate potential implications on effective educational practice. Correspondingly, the attributes of effective schools can be used to prescribe sound educational parameters to insure clarity and completeness in issue definition refinement and in the development and selection of the best course of action.

Figures 3 and 4 delineate those attributes of effective schools that have been derived from the effective schools research.⁴ The social organization component of the effective schools attributes (Figure 3) recognizes that a common set of values and expectations form a nucleus around which the community of the school rallies. It is these attributes of clear academic and social behavior goals, order and discipline, high expectations of both teachers and students, teacher efficacy, pervasive caring, public rewards and incentives, administrative leadership, and community support that create a school climate that encourages student involvement and fosters student achievement. The instruction and curriculum attributes (Figure 4) of high academic learning time, frequent and monitored homework, frequent monitoring of student progress, tightly coupled curriculum, variety of teaching strategies, and opportunities for student responsibility in the context of the social organization attributes combine to foster those educational activities that promote effective educational practice and learning. There is no hard and fast delineation between the sets of attributes; rather they should be viewed as

ATTRIBUTES OF EFFECTIVE SCHOOLS

(2.00)

SOCIAL ORGANIZATION (2.10)

- 2.11 CLEAR ACADEMIC AND SOCIAL BEHAVIOR GOALS
- 2.12 ORDER AND DISCIPLINE
- 2.13 HIGH EXPECTATIONS
- 2.14 TEACHER EFFICACY
- 2.15 PERVASIVE CARING
- 2.16 PUBLIC REWARDS AND INCENTIVES
- 2.17 ADMINISTRATIVE LEADERSHIP
- 2.18 COMMUNITY SUPPORT

SOURCE: Richard H. Hersch
"What Makes Some Schools
and Teachers More Effective?"

Figure 3. Social Organization Attributes
of Effective Schools

ATTRIBUTES OF EFFECTIVE SCHOOLS

(2.00)

CURRICULUM & INSTRUCTION (2.20)

- 2.21 HIGH ACADEMIC LEARNING TIME
- 2.22 FREQUENT AND MONITORED HOMEWORK
- 2.23 FREQUENT MONITORING OF STUDENT PROGRESS
- 2.24 TIGHTLY COUPLED CURRICULUM
- 2.25 VARIETY OF TEACHING STRATEGIES
- 2.26 OPPORTUNITIES FOR STUDENT RESPONSIBILITY

SOURCE: Richard H. Hersch
"What Makes Some Schools
and Teachers More Effective?"

Figure 4. Curriculum and Instruction Attributes
of Effective Schools

complementary and overlapping. The important conclusion that one should draw from the effective schools research is that it is the cumulative effects of the interaction of these attributes that creates the conditions for effective educational practice and student achievement. If one is looking at higher education, then Astin's extensive longitudinal research findings establishing (1) academic rigor, (2) high expectations of faculty and students, (3) involvement of students and faculty, and (4) an environment of caring and concern as effective evaluative criteria can be used in place of the public school oriented effective schools research.⁵

Issue Definition and Course(s) of Action Refined and Selected

Combining an in-depth analysis of relevant educational foundations with the findings of the effective schools research during the data analysis phase of the decision making process provides a set of lenses through which the administrator can objectively view and evaluate the issue and the preliminary courses of action to address the issue. From this evaluation, sensitive and meaningful refinements can be made so that the issue is well defined and so that the best course of action is selected, can be well defended, and provides for efficient resource utilization in developing implementing policies.

With the issue explicitly defined and a determined course of action established, the educational leader now turns to the difficult task of policy development. This step is the key transition dimension of moving from course of action selection to

effective decision implementation and warrants our intense study as educational leaders. Harmon relates the following:

The story is told that during the Crimean War a committee of inquiry called upon the British Surgeon-General to testify regarding gross inadequacies in the medical services at the front. The Surgeon-General's defense was simple: "Our medical services," he said, "would be perfectly adequate were it not for the casualties." Perhaps our response should be in a similar vein. Policy-making in education is in fine shape, except for the casualties: the fact that, often, we have a limited understanding of the complexities of the policy process; the fact that our policy-making structures are under attack; the fact that policy outputs often do not live up to expectations; and the fact that education policy must be made and implemented in an increasingly difficult environment. In essence, my point is that we can secure some help from the wide range of conceptual tools and frameworks that are available, and that in educational administration further study of the policy process should have a high priority.⁶

Policy formulation is the development of a guide for making decisions. If a decision provides help for decisions in other decision settings, it is a policy decision, because it establishes a precedent and provides guidance for future decision making. An important characteristic of a policy is that it provides a guide and framework for subordinates' decisions. Therefore, effective and articulate policies encourage the delegation of decision making; they do not predetermine decisions. This, too, is a critical consideration, for it is at this point that we communicate the level of trust and degrees of freedom within which we will allow others to manage policy interpretation and implementation. While procedure development

comes later in the process, it is instructive at this point to distinguish between policy and procedure. Procedure is a methodology that describes, in detail, the steps to be taken in order to accomplish an objective. Procedures emphasize definite tasks and detail instructions; policies focus on general approaches and purposed parameters. The point on this continuum at which the administrator defines the relevant policy or policies must be consistent with the realities identified in the data analysis phase, with the time available for decision implementation and with the managerial and technical competencies of those responsible for carrying out the policy.

To this end, the administrator is effectively asking, how can we move from policy to goal realization? This process flows inextricably from the preceding elements of the model. An analysis and adaptation of the managerial components available to the organization for effecting the policy should identify the strengths and weaknesses within each component and the resources that need to be brought to bear to effectively manage policy implementation and procedure development. Figures 5 and 6 delineate matrices that can be utilized to effectively integrate policy development, managerial components and development of procedures with the continuing application of the effective schools research as diagnostic criterion. These criterion are diagnostic at this point in order to examine the policies and procedures developed, the managerial components applied, and the dynamics between and among these variables to insure effective

educational practice. By identifying policies consistent with the course of action selected and the effective schools attributes, planning, organizing, communicating, controlling and directing functions can be focused to develop procedures that will create the conditions for effective educational practice.⁷ For example, let's say that the school administration has been approached by a number of teachers and parents expressing concern about the significant increase in the number of standardized tests and locally generated tests that students must take, the kinds of competencies being evaluated and the way the results are being used. The Board of Education has asked you to develop a proposed policy statement to address this concern. True to our model, you or a committee or committees have carefully analyzed the issue considering the relevant historical, philosophical, sociological, political/economical and organizational factors and implications in concert with the effective schools attributes in a prescriptive mode. From this analysis, you have refined the issue definition as follows: Testing emphasis in "Our Town ISD" has shifted to emphasize content mastery almost to the exclusion of assessing the affective and psychomotor dimensions of the student. The course of action that has been selected to address this issue is that, "Our Town ISD" will conduct a systematic evaluation of district testing and assessment practices over the next fifteen months. From the comprehensive decision process to date, the following policy has been developed to present to the Board. "Student achievement in 'Our Town ISD' will be determined

by a comprehensive evaluation system consistent with sound educational research that considers all aspects of student development -- cognitive, affective and psychomotor. With this as the overarching policy statement, one can then utilize the matrices (Figures 5 and 6) to formulate sub-policies for each applicable effective school attribute. From these sub-policies, appropriate planning, organizing, communicating, controlling, and directing actions can be considered and effected to develop procedures consistent with the effective schools attributes resulting in decision implementation and effective educational practice. In this phase of the process, a critical consideration is who is responsible and held accountable for the various levels of policy and procedure development. As educational leaders, we should resist, in fact, oppose developing sub-policies and procedures ourselves that rightly belong to the implementing staff -- namely teachers. If we are to expect a professional response, then we must relinquish control and trust our faculty.

Decision Implementation and Review

Once the decision is implemented, the outcomes from the decision are continually reviewed and reintegrated into the model to modify or validate the decision. Since the effective schools attributes have served as evaluative criterion throughout the process, any modification to decision implementation should be minimal.

Certainly, many of the sub-steps within this phase are routinely accomplished and overlap in their execution. The

ADMINISTRATORS AS MANAGERS OF MORE EFFECTIVE SCHOOLS

EFFECTIVE SCHOOL ATTRIBUTES SOCIAL ORGANIZATION 5.10	MANAGERIAL COMPONENTS (4.00)						PROCEDURES DEVELOPMENT 6.00
	POLICY DEVELOPMENT 3.00	PLANNING 4.10	ORGANIZING 4.20	COMMUNICATING 4.30	CONTROLLING 4.40	DIRECTING 4.50	
CLEAR ACADEMIC AND SOCIAL BEHAVIOR GOALS 5.11							
ORDER AND DISCIPLINE 5.12							
HIGH EXPECTATIONS 5.13							
TEACHER EFFICACY 5.14							
PERVASIVE CARING 5.15							
PUBLIC REWARDS AND INCENTIVES 5.16							
ADMINISTRATIVE LEADERSHIP 5.17							
COMMUNITY SUPPORT 5.18							

Figure 5. Matrix for Integration, Analysis and Development of Policies, Managerial Components and Procedures with Social Organization Effective School Attributes

ADMINISTRATORS AS MANAGERS OF MORE EFFECTIVE SCHOOLS

MANAGERIAL COMPONENTS (4.00)

		MANAGERIAL COMPONENTS (4.00)					
EFFECTIVE SCHOOL ATTRIBUTES CURRICULUM & INSTRUCTION 5.20	POLICY DEVELOPMENT 3.00	PLANNING 4.10	ORGANIZING 4.20	COMMUNICATING 4.30	CONTROLLING 4.40	DIRECTING 4.50	PROCEDURES DEVELOPMENT 6.00
HIGH ACADEMIC LEARNING TIME 5.21							
FREQUENT AND MONITORED HOMEWORK 5.22							
FREQUENT MONITORING OF STUDENT PROGRESS 5.23							
TIGHTLY COUPLED CURRICULUM 5.24							
VARIETY OF TEACHING STRATEGIES 5.25							
OPPORTUNITIES FOR STUDENT RESPONSIBILITY 5.26							

Figure 6. Matrix for Integration, Analysis, and Development of Policies, Managerial Components, and Procedures with Instruction and Curriculum Effective School Attributes

strength in the model comes not from "muddling in the minutiae;" rather the strength comes from using the model as a conceptual framework in analyzing, evaluating and synthesizing essential components in educational decision making. Figures 7 and 8 provide skeletal models which can be used by administrators to identify contextual parameters with potential impact in a given educational decision setting. Applying the principals developed here in conjunction with one's own administrative style and decision making strategies should provide an improved model for educational decision making resulting in more effective educational practice. To this end, the model provides a sequential integrated approach to decision making which can be solidly defended and easily understood by lay persons and professional educators alike. By incorporating analyses of foundations common to all walks of life, accepted practices of management, sound educational research, and a disciplined decision making process, the educational administrator can provide the effective, proactive leadership that society and the educational community demand and deserve.

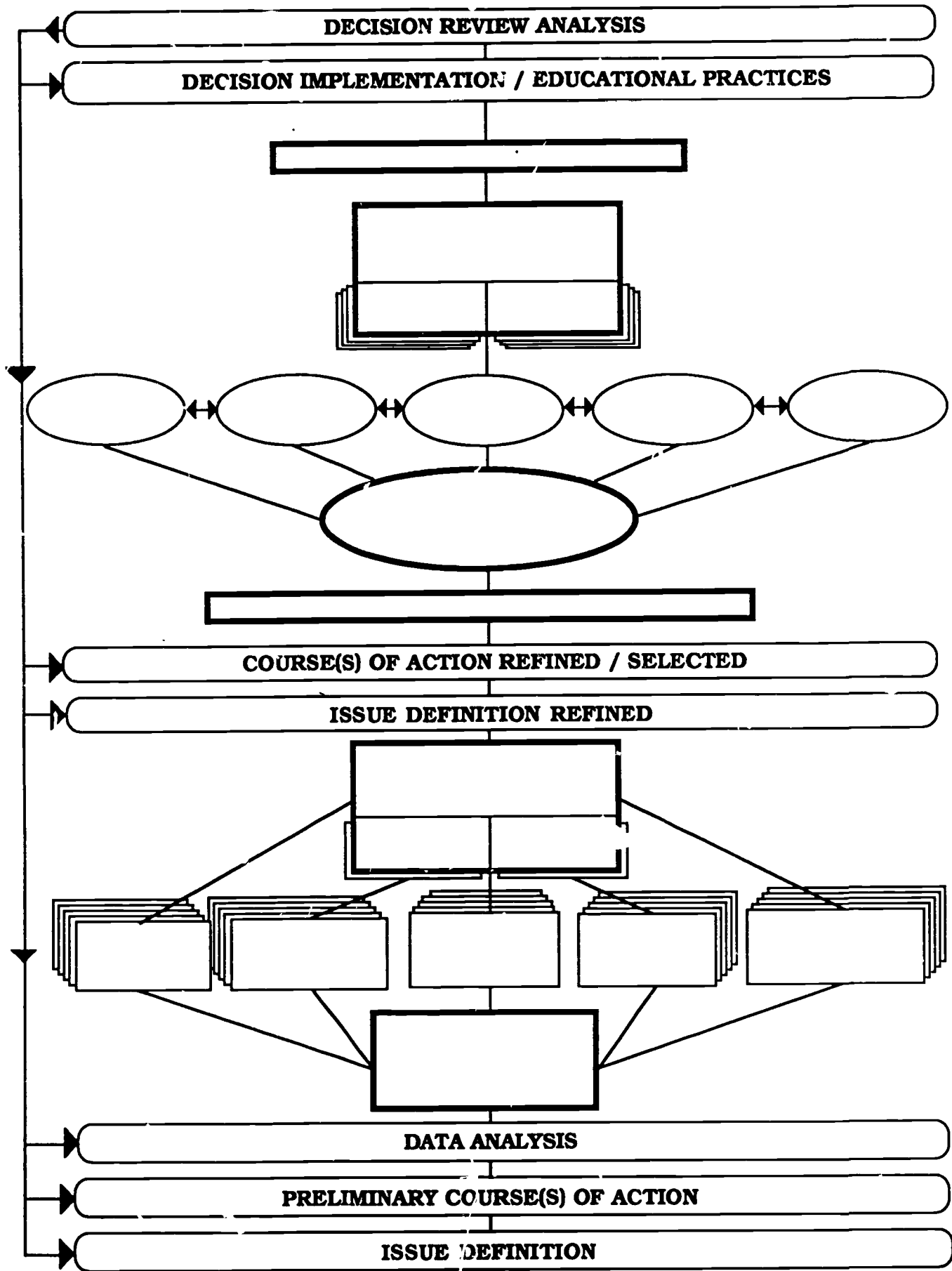


Figure 7. Skeletal Model for Improved Educational Decision Making for Application to a Particular Decision Setting

**FOUNDATIONS OF EDUCATIONAL
DECISION MAKING**

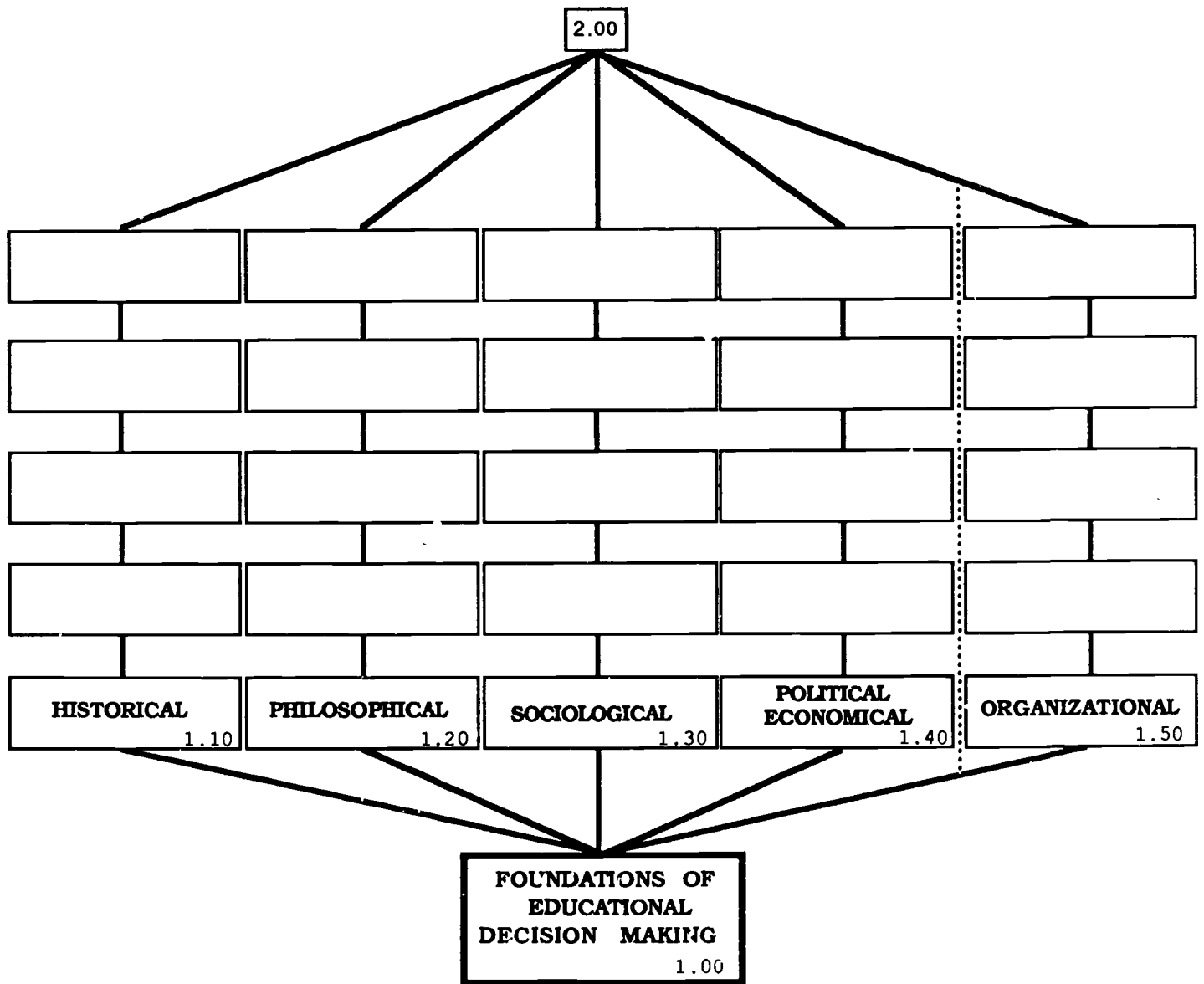


Figure 8. Skeletal Foundations of Educational Decision Making Components for Application to a Particular Decision Setting

REFERENCES

1. Getzels, Jacob W., James M. Lipham, and Roald R. Campbell, Educational Administration as a Social Process: Theory, Research and Practice (New York: Harper and Row, 1968), p. 52.
2. Drucker, Peter F., The Effective Executive (New York: Harper and Row, 1966) pp. 113-142.
3. Hoy, Wayne K. and Cecil G. Miskel, Educational Administration: Theory and Practice (3rd Edition) (New York: Random House, 1987) p. 323.
4. Hersh, Richard H., "What Makes Some Schools and Teachers More Effective?" The Future of Teacher Education: Needed Research and Practice, Dean C. Corrigan et.al (eds), (College Station, Texas: Texas A&M University Press, 1982), pp. 1-11.
5. Astin, Alexander, Four Critical Years, (San Francisco: Jossey-Bass, 1978.)
6. Harman, Grant, "Policy Making and the Policy Process in Education," Canadian and Comparative Educational Administration, Robin H. Farquhar and Ian E. Housego (eds.), (Vancouver: University of British Columbia, 1980), p. 73.

BIBLIOGRAPHY

1. Bogue, E. Grady, The Enemies of Leadership - Lessons for Leaders in Education (Bloomington, Indiana: Phi Delta Kappa Educational Foundation), 1985.
2. Carver, Fred D. and Thomas J. Sergiovanni (eds.), Organizations and Human Behavior: Focus on Steels (New York: McGraw-Hill Book Company), 1969.
3. Hansot, Elisabeth and David Tyack, "A Useable Past: Using History in Educational Policy," in 1982 NSSE Yearbook, Policy Making in Education, Ann Lieberman and Milbrey W. McLaughlin (eds), (Chicago: University of Chicago Press), 1982.
4. Hardwick, C.T. and B.F. Landuyt, Administrative Strategy and Decision Making (Cincinnati: South-Western Publishing Company), 1966.
5. Housego, Ian E., "Administration and Policy-Making in Contemporary Education: The Contemporary Predicament," in Robin H. Farquhar and Ian E. Housego (eds.), Canadian and Comparative Educational Administration, (Vancouver, British Columbia: University of British Columbia), 1980.
6. Kimbrough, Ralph B. and Michael Y. Nunnery, Educational Administration: An Introduction (2nd ed.), (New York: Macmillan Publishing Co., Inc.), 1983.
7. Lieberman, Ann, "Practice Makes Policy: The Tensions of School Improvement," in 1982 NSSE Yearbook, Policy Making in Education, Ann Lieberman and Milbrey W. McLaughlin (eds), (Chicago: University of Chicago Press), 1982.
8. Lewis, James, Achieving Excellence in Our Schools . . . by Taking Lessons from America's Best Run Companies (Westbury, New York: J.L. Wilkerson Publishing Company), 1985.
9. Nystrand, Raphael O. and Frederick Staub, "The Court as Educational Policy Makers," in 1978 NSSE Yearbook, The Courts and Education, Clifford P. Hooker (ed), (Chicago: University of Chicago Press), 1978.
10. Owens, Robert G., Organizational Behavior in Education (3rd ed.), (Engelwood Cliffs, New Jersey: Prentice-Hall, Inc.), 1987.

11. Pulliam, John D., History of Education in America (2nd ed.), (Columbus, Ohio: Charles E. Merrill Publishing Company), 1975.
12. Scribner, Jay D. (ed), The Politics of Education 1977 NSSE Yearbook, (Chicago: The University of Chicago Press), 1977.
13. Sergiovanni, Thomas J. and Fred D. Carver, The New School Executive: A Theory of Administration (New York: Harper and Row), 1973.
14. Squires, David A. (et.al.), Effective Schools and Classrooms: A Research - Based Perspective (Alexandria, Virginia: Association for Supervision and Curriculum Development), 1983.
15. Stalcup, Robert J., Sociology and Education (Columbus, Ohio: Charles E. Merrill Publishing Company), 1967.
16. Stufflebeam, Daniel I. (et.al.), Educational Evaluation and Decision Making (Itasca, Illinois: F.E. Pencil Publishers, Inc.), 1971.
17. Worthen, Blaine R. and James R. Sanders, Educational Evaluation: Theory and Practice (Worthington, Ohio: Charles A. Jones Publishing Company), 1973.
18. Yeckey, Carol Camp, "Emerging Policy Research in Educational Research and Decisionmaking," in Edmond W. Gordon, (ed.), Review of Research in Education X (Washington, D.C.: American Educational Research Association), 1983.