This paper discusses the financial crisis facing public education in the United States today and argues that the most effective response to this crisis is to improve the decision-making skills of educational administrators. Based on a review of the literature on administrative decision-making and organizational change, the author examines several alternative approaches and recommends a developmental procedure that will result in improved administrative value skills. In his discussion, the author identifies specific administrative value skills that may be used as criteria for measuring the degree of improvement in decision-making by educational administrators. (JG)
This paper identifies a current educational issue of national scope and recognizes a possible solution. The thrust of the paper is to suggest that administrators of educational institutions - public schools - can improve their decision making capabilities which will be a response to the identified problem. The process suggested reflects a developmental procedure which results in improved administrative value skills. The important change is the value skills and it is the process of change which is personally and organizationally beneficial.
The paper is of a continual flow style, but follows a distinct pattern. For contextual reference, subject matter and page numbers are indicated:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarification of Problem</td>
<td>1 - 2</td>
</tr>
<tr>
<td>Justification of suggested change</td>
<td>2 - 3</td>
</tr>
<tr>
<td>Workability of recommendation</td>
<td>4 - 6</td>
</tr>
<tr>
<td>Alternatives to identified problem solution</td>
<td>6 - 7</td>
</tr>
<tr>
<td>Conflicts involved in change</td>
<td>7</td>
</tr>
<tr>
<td>Hierarchy of suggested change</td>
<td>8 - 9</td>
</tr>
<tr>
<td>Action Plan for change</td>
<td>9 - 10</td>
</tr>
<tr>
<td>Evaluation of Administrative Value Skills</td>
<td>10 - 13</td>
</tr>
<tr>
<td>Summary</td>
<td>13</td>
</tr>
</tbody>
</table>

3
Improving Educational Administrative Decisions

The percentage of Gross National Product committed to education has trended upward for the past two decades and after accelerating in the 1960's, has tended to soften in the 1970's; as apprised by "The Pennsylvania Professor", October, 1973. In an earlier issue this same publication reported that "it is estimated that federal outlays alone for education of all types will total $13.8 billion in 1974, an increase of $247 million over 1973". A record $96.7 billion for educating about 59 million students, making education the nation's largest enterprise, the United States Office of Education has announced. "Education will be the principal occupation of 30% of the population", said Commissioner John R. Quinn; "in fact education may now be considered the nation's largest enterprise in terms of people involved and the number of dollars expended". The U. S. Office of Education said the $96.7 billion amounts to 8% of the GNP.

Recent surveys of public reaction to expenditures for education indicate a significant counter reaction to the increasing flow of tax dollars to support public education. In states where public referendum is required to finance expansionary construction and program, for the first time in the post world war II era, a greater number of such referenda were defeated at the polls than were approved. There is an increasing demand for accountability and public reporting from administrators; case in point being the "sunshine law" in the Commonwealth of Pennsylvania which requires that all official meetings be open to the public, except those
dealing with personnel matters, and all decisions requiring a vote
must be in open session. These laws apply to all public authorities,
but the public schools are receiving the most public reaction. This
trend to public exposure of the decision making process may be a
reaction to the credibility gap existing with public officials, and
the local School Boards are the most visible and vulnerable to
attack, whether that attack is justified or not. Compounding this
credibility problem is the taxpayer revolt to ever increasing property
taxes; this revolt is traceable directly to the inflationary spiral
which has a double impact. School organizations face the same
inflationary costs as other organizations; salary and labor demands
increase, fuel and utility costs escalate, books, paper and
instructional materials continue to get more expensive. Also, the
double impact hits public school organizations because the source of
their revenue is tax dollars and this source is also a victim of
inflation.

Organizational structures need a body of responsible and
responsive managers (administrators) to maintain and guide the
direction of the enterprise. It is probably an exaggeration to say
that recent developments in educational administration constitute a
revolution, but it is no exaggeration to say that the last decade or
two have witnessed profound changes which seem to forecast more extensive
developments in the near future ("Organizational Behavior in Schools",
R. G. Owens). Much of the "new" in educational administration involves
new knowledge which leads to new insights into administrative behavior
with consequent hope for increasing the professional capability of
school administrators to meet the challenges that lie ahead. To
understand some of whatever it is that is being described as "new" in
educational administration, there are four beliefs to which the adherents
of the "new" would tend to subscribe:

I Administration is comprised of specialized skills, knowledge, and understandings which are different from the activities being administered.

II The practice of administration, in the "new" sense, is based on a realistic view of organizations as they actually exist.

III The scientific foundations of the "new administration" are in the behavioral sciences.

IV Change is inevitable in educational administration, and innovation is urgently needed.

The Graduate School of Business Administration, University of Minnesota currently has underway a study entitled "The Effective Use of Management Science in University Administration". The underlying reason for this study is the realization that education has entered an era of crises. An economic crisis due to dwindling enrollments and rising costs, a crisis of public confidence and a crisis of student disenchantment. These crises make public institutions more difficult to manage and they call for improved management methods and procedures. It is postulated that the development and implementation of a system of management planning which entails the participative determination of long range objectives, short term goals, and fiscal quantification of a budget can improve both the managers and the management of an educational institution. Participative goal setting is a function of planning which is a result of accurate and timely information which is a result of valid, current data input. Combining intelligent administrators, good information, and participative goal setting can lead to correction of costly decisions or to the maintenance of effective, beneficial decisions.
Professor H. A. Simon, Carnegie Institute of Technology, has stated, "a major problem in teaching the behavioral sciences effectively is to provide an effective counterpart to the (natural science) laboratory... We can use (our own) experience as one part of our behavioral science laboratory to test our abstract concepts, and to exercise skills of living with others. First hand experience in particular kinds of social institutions - especially organizations - is harder to come by." A general model of a problem or decision situation can be expressed as follows (Ackoff, 1962):

\[ Y = f(X, Y) \]

where

- \( V \) = the measure of the value of the decision that is made
- \( X \) = the variables which are subject to control by the decision-maker
- \( Y \) = the factors, variable or constant, which affect performance but which are not subject to control by the decision-maker within the scope of the problem as defined
- \( f \) = the functional relationship between the decision variables and performance factors, and the dependent variable \( Y \).

Data input to a process leads to information output and in the context of administrative decision-making information in an accurate state and in a timely mode contributes to improved decisions. Equating information with communication, the following five types of communication mentioned by March and Simon (1958) are all represented:
1. Communication for non-programmed activity (heuristics)
2. Communication to establish programs
3. Communications to provide data required for the executive of programs.
4. Communications to initiate programs
5. Communications to provide information on the results of activities

The design, development and implementation of an integrated information system for an organization is a complicated process and it is necessary for at least three groups to collaborate, namely information systems specialists, management scientists, and administrators. In an important alteration of an organization's information system there also probably should be present staff specialists of different types in the areas involved. The approach to more integrated information systems will fail unless all these groups participate and seek a realistic understanding of how decisions are made in an organization, the different types of decisions that are made, the information requirements to make the decisions, and the preferred means to get the required information to the right administrators (Ackoff, 1967). The instrumental value of an improved information system hopefully is improved decision-making by administrators constructively using the output of the system, however considered of greater importance is the intrinsic value of the planning, design and development process which requires the involvement of the administrators and staff. This valuing process should inculcate a behavioral pattern of decision making with a greater degree of confidence of expectations because the decision is a product of better analysis, which should in turn result in better performance of the
organization and the administrator can be more satisfied with his (her) effort.

Reflecting on the root causes of the current crises in public education elicited earlier in this paper, one can consider alternatives to the program and process indicated as a helpful solution to these crises. Inertia exists in any organization - inertia in this context meaning the tendency of a body at rest to remain at rest - and inertia is prevalent in public (government) organizations. The mechanistic organizational system tends to prevail, that is an enterprise functioning under relatively stable conditions. Here the problems and tasks facing the organization as a whole are broken down into specialisms. Each individual pursuing his task as something distinct from the real tasks of the organization as a whole. This is contrasted with the organic organizational system which are adapted to unstable conditions (such as the crises facing education today), when problems and requirements for action arise which cannot be broken down and distributed among specialist roles within a clearly defined hierarchy. (Burns and Stalker, 1971).

In public educational organizations, the system being suggested is a holistic organization; in such a system the members are, from the holistic viewpoint, not significantly connected with each other except with reference to the whole (gestalten psychology - "the whole is more than the sum of its parts") (Angyal, 1941).

Without some form of constructive and corrective action from within public education organizations, there inevitably will be some form of externality which will be forced on the organization. Externalities in the form of citizens groups, taxpayers, the stakeholders who are both parents of the product of the educational system - their children - and the sources of revenue of the organization, via taxes.
Educational administrators have lived in and therefore are products of a constantly growing organism, public schools; more children, more programs, more professional people, more service people, and more money have been the prevailing conditions for thirty years. Now there are changes creating dysfunctions to that pattern; as mentioned earlier. School administrators must change or external forces will create further dysfunctional changes.

This is a period of conflict for school administrators. Strangely in a field with generally accepted intrinsic values, educational administrators are manifesting symptoms of alienation. Alienation in this context is a general syndrome made up of a number of different objective conditions and subjective feeling states which emerge from certain relationships between administrators and the sociotechnical settings of schools. Four types of alienation can be identified as developing - powerlessness, meaninglessness, isolation and self-estrangement. These may be accepted as exaggerated expressions of frustration and anxieties, but the discontent among mature administrators reaches the level of early retirement and the search for alternative career opportunities, which makes a case for a greater concern than frustration and anxiety which may be considered short term, temporary negative conditions. There are expectation conflicts; what one has come to expect as the outcomes of decisions are now reversed and new programs are questioned, new physical structures are rejected and new finances are evaporated. The probability of success of administrators' decisions have shifted from a positive expectancy to not only a lesser probability, but to a negative condition. The educational administrator must recognize and face the need for change.
For too long, educators have looked at our educational system as a self-sufficient total system, quite autonomous and independent of other important and related systems. As a result, education has not anticipated the scientific, economic or social needs of the society in which it operates and to which it contributes. School dropouts, youth unemployment, and related national problems reflect an inadequate response of the educational system to the new and changing educational requirements in the technological society in which we live. This kind of restricted nonsystematic thinking is also true for those of us with vested interests in audio-visual, guidance, administration, curriculum and other areas of the educational program. We have rarely looked at the whole picture to see what a change in our social or economic systems implies for education, or to see what a change in instruction or curriculum means for other areas of the total educational program in a school. An educational system is not a self-contained system. It interacts with the larger system of which it is a part, e.g., the community. The school produces an effect on the community, while the community, in turn, modifies the school's objectives in a dynamic way (Andrew & Moir, 1970).

R. W. Hostrop identifies seven basic principles associated with applying a systems analysis as a strategy for maximizing learning output while minimizing input costs. They are:

1. the principle of individual differences
2. the principle of self-instruction
3. the principle of combining human energies and physical resources
4. the principle of economics of scale
5. the principle of division of labor
6. the principle of concentration and critical mass
7. the principle of optimizing

The foregoing, in some instances, suggests some significant changes from conventional administrative practices. Others can be implemented with relative ease. All the foregoing unquestionably, when imaginatively and vigorously applied, can achieve traditional procedures, but such promising newer ones are cited.

The introduction of a new technology - an integrated information system - to an organization has serious behavioral implications when that organization is considered from the systems approach. The behavioral reactions to change and attitudes of individuals within the various subsets of the organization are important and critical elements to the success of implementing technical change. Anxiety rises when "normal" work patterns are changed or threatened, fear of unemployment or reduced employment is induced, and levels of expectation change in both favorable and unfavorable directions. How to cope with these internal changes in order to assure a continuity of the steady state or the early restoration to a steady state after the impact of change, is a crucial question. The systems approach to organizational study is to consider the organization as a holistic system in which the environment, the formal arrangements, the social system, and the technical systems are all constantly interfacing. The organization is not a static arrangement of jobs that can be captured in an organization chart but is a pattern of inputs, outputs, feedback, delays, and flows. If such a system is to survive, it can only do so if - after the
various disturbances that are bound to occur because of external and internal changes - it settles down into a "steady state" in which inputs, outputs and flows are proceeding in an orderly way. By this process, the organization obtains the additional energy to render it "negentropic" - it becomes capable of attaining stability in a time independent steady state, a necessary condition of adaptability to environmental variance (Emery and Trist, 1965).

The behavioral aspect of improving educational administrative decisions manifests in the administrative value skills. A set of ten such value skills are identified by Dwyer, 1975, in three broad categories as follows:

- Interpersonal relations skills
  1. communications
  2. participation
  3. autonomy/accountability

- Skills relating to susceptibility to learning and growing
  4. experimentation
  5. learning
  6. flexibility
  7. adaptability

- Behavioral pattern skills
  8. continuity
  9. integration
  10. coordination

With an understanding of these administrative value skills and an opportunity to measure their change in individuals, one could
evaluate the improvement of educational administrative decisions. Looking first at the interpersonal relations value skills it is apparent that these involve the interface of the administrator and other members of the organization. Bennis in discussing interpersonal communications states that communications plays a large part in our total personality make up. It is communication that "presents our self" to others; it is communication that we use to negotiate and exchange interpersonally; it is communication that we use to expose our innermost feelings and that provides the data by which inferences about our innermost feelings are made. Not all communication is verbal; at times the most persuasive and important part of communication apparatus is non-verbal - a gesture, dress, accent, manner of speech, posture, etc. An individual participates in something when he takes a part or share in that thing. Since taking a part or sharing is always involved, participation takes place in a social context. Since administrators are those who accomplish results through subordinates, the latter are always directly and intimately affected by managerial decisions and therefore may have a considerable interest in them. McGregor says that one of the most important conditions of an administrator's growth and development centers around his opportunities to express his ideas and to contribute his suggestions before his superiors take action on matters which involve him. Regarding autonomy and accountability, McClelland has pointed out that environmental factors greatly influence achievement motivation. Recent research indicates that high achievers will be attracted to those organizational environments which offer:

1. personal responsibility for accomplishments
2. freedom to pursue goals by means of one's own choosing
3. prompt and unbiased feedback of the results of action
4. moderately risky situations
5. consistent rewards and recognition for jobs well done

The administrative value skills relating to susceptibility to learning and growing are more personalized and describe individual trait patterns which are developmental. When one tests and tries new ventures, an experiential process is taking place which allows for the growth of background material which is valuable when one makes a non-programmed decision; this term is used by H. A. Simon to describe the ill-structured novel policy type decisions which are solved intuitively or by heuristic problem-solving techniques.

Learning is the continuing process of acquiring new or updating old data. Administrators with a continuing learning experience remain fresh and knowledgeable and are capable of making improved decisions as a result of this refreshed knowledge base. Flexibility and adaptability are terms relating to mobility and in the cognitive sense are administrative value skills. Although the words may be synonymous, the former as used in this mode refers to the capability of performing a variety of tasks or missions well and the latter is more related to the ability to perform well under a variety of circumstances.

With the value skills involving interpersonal relations and also those involving more personalized trait patterns, there is a completeness when coupled with certain behavioral pattern skills, namely, continuity, integration and coordination. Since value skills are acquired over time and in an evolutionary manner, there needs to be a continuing and continual expression of behavior; that is, a degree of consistency of value behavior. Continuity and
consistency in this sense means a viscillation or shifting of value behavior. Since there is a process of values development, there will be certain discontinuity during the developmental process, however once there is a full realization of posture, continuity of behavior results. With this process of development and continuity, there is an inherent commensurate integration of beliefs and value reactions. Values developed from beliefs are not in conflict with each other; if there were to be conflict one could not have an established belief thus no value. It would be inconsistent to have conflicting values. Values that are continuing and integrated are also coordinated; an uncoordinated value structure would also be a reflection of personal conflict, which by nature is dysfunctional.

In summary, this paper has purposely followed an outline structure intended to logically clarify a current problem – the crisis of public education – and to justify a position of remedial action – improving administrative decision making. The workability of an integrated information system and alternative courses of action were discussed with an exploration of the conflicts involved in a change of this magnitude. A specific plan of action was suggested with a realization of the impact of new technology on administrative behavior. Finally specific administrative value skills were identified which when accepted and identified may be used as a measurement criteria for indicating the degree of success of improved educational administrative decisions.