Three decision-making models that have applications for college presidents and administrators are reviewed. While both individual and group decision-making are addressed, emphasis is placed on the importance of group decisions on institutional policy planning. The model of Edmund M. Burke (1979) presents specific decision-making strategies in terms of conditions for effectiveness, techniques, the technology of change, and the planning phase. All group decision makers are actively involved and decisions occur through joint problem-solving. The key to the second model, that of James Lipham (1974), is that the college president needs to be aware of the perceptual screen that affects the decision maker (societal, organizational, and individual values). Lipham's model, which can be used for individual or group decision-making, involves a systems analysis perspective for conducting a needs assessment. The third delegating problem-solving model, by Victor Vroom and Philip Yetton (1973), involves decision methods for individuals or a group, and may involve the college president and a single subordinate. Flow charts and tables illustrate the models, including a graphical depiction of the time line of Lipham's model. (SW)
Decision-Making Models With Sets of Strategies
For Applications to Individuals and Groups
in Higher Education
by Wanda E. Gill

Abstract

The author examines three decision making models with sets of strategies for applications to individuals and groups in higher education. The models of Edmund M. Burke (1979), James Liphams (1974) and Vroom and Yetton (1973) are presented. Specific applications for the college president and groups of administrators in higher education are discussed. The author applies the theory to the higher education setting and emphasizes the importance of group decisions on institutional policy and planning, if it is to work.
Colleges and universities are faced with mounting problems in the decade of the eighties. Adults are returning to the campuses in larger numbers. With them come a different set of expectations, different standards of performances and different life experiences. Some are on campus to learn new skills, to re-tool for a new career, or for growth experiences. This population presents a real challenge to college administrators and college presidents who have the tasks of deciding which courses are marketable, which office hours are most flexible and what class schedule is best suited for this group. At the same time, these administrators must decide what curriculum at what level is best suited for the 17-18 year old student described in A Nation At Risk by the Commission on Excellence in Education. This traditional college age group has a different set of needed and expectations. The nature of decisions is frequently the result of the process. This paper examines decision-making as an individual and as a group process in higher education.
Definitions

A decision is a choice that determines what action, if any, shall be taken, or what policy shall be adopted to deal with a problem situation.

A conclusion is a choice between alleged or predicted facts relating to past, present, or future situations.

A judgment relates to action or facts. It is the result of comparing values involved in problem situations—such as the values of suggested purposes, available alternatives, or probable consequences.

Types of decision

1. Impulsive
   These are determined by emotional reactions to situations, without reflection.

2. Routine decisions
   Routine decisions deal with familiar situations in accordance with habits, customs, or rules.

3. Casuistic decisions
   These are determined by accepted ethical, moral or religious principles.

4. Thoughtful decisions
   Thoughtful decisions are made after giving thought to pertinent factors as the problem situation, the alternative causes of action available, and the probable consequences of each.

The main factors involved in thoughtful decision-making are:

1. Problem situation with which the decision will deal: a situation which is unsatisfactory in some respect and is a problem because the proper action to take, if any, is not obvious.

2. Purpose to be achieved if practicable; the end to be aimed at.

3. Available alternative decisions; alternative deals for dealing with the situation so as to achieve the desired purpose. Since each decision is a choice between alternative possible decisions, at least two such alternatives should be known, but one may be to take no action.

4. Probable consequences of each alternative. Since each alternative will have, if chosen, its natural consequences, a choice between alternatives is, in effect, a choice between their consequences.

5. Values to the decision-maker of the probable consequences of the alternatives. A comparison of such values is necessary to determine which alternative is likely to have the most desirable consequences to him, or, if the decision-maker is faced with a choice of evils, the least undesirable consequences.

Individual Decision-Making
James Lipham (see Table A)

The college president, as an individual decision maker, identifies problems in the system classifies and defines the problem in terms of his perceptual screen (societal, organizational and individual values). The decision-maker (college president) is provided with information on a formal and on an informal basis. Alternatives are formed based on expected outcomes. Once all the available information is secured a choice is made. The choice is implemented and the decision is later evaluated. Decisions are made based on the best available information at the time. The cultural ingredients of societal, organizational and individual values will affect the assessment of the decision.

The key term in James Lipham's model that the college president needs to be aware of is the perceptual screen of the decision maker to paraphrase the point, the autistic perceptions of the college president may affect the decision. That perception is based on the governing board of the institution, the political climate in the legislature and on the campus and on the president's goals and objectives for the institution. The time line in Lipham's model (Table A) graphically depicts the importance of time implies the need and desire for change as institutions go through the transitions of the times.

Table C graphically depicts decision making from a systems analysis perspective. In this case, the entire system is analyzed through a needs assessment. Once specific needs have been identified, management by objectives models are designed showing goals and objectives within specific time frames. Solutions are selected and revised as needed. A Pert Chart or time frame for implementing the strategy is used by management to assure that the organizational goals are achieved on time. Evaluation is used to test the effectiveness of the decision.

Many colleges and universities approach decision-making for the individual in this way. Administrators and faculty are frequently evaluated in this manner.
When their performance is evaluated, faculty and administrators are given the opportunity to determine what the performance goals and objectives are and how they are to be evaluated. This process is described as an individual one because a single person is deciding. In higher education, that person could be the college president, any vice-president, dean or supervisor. The model is more current than the one depicted by Lipham in Table A.

Vroom and Yetton (see Table B)

The decision-methods for individual problems described under Individual Problems in Table B involve the college president with a single subordinate. Two-way communication between the college president and the subordinate is greatly limited by the communication skills of the people involved, the time allocated for the search for alternative solutions and the organizational structure. In this example, the president could theoretically delegate responsibility for problem solving to the subordinate. The problem solution need not be known to the college president, as is indicated in Table B.

There are colleges that are organized with a Vice President for Academic Affairs or other chief administrative person who is given responsibility for key individual decisions. The college president has no need to know the solutions for individual problems or the strategies employed for solving them. This "delegating problem solving" model exemplifies a great deal of trust and open communication between the college president and the vice president of academic affairs or some other chief administrative authority.
### Table B

#### Group Problems

| I. | You solve the problem or make the decision yourself using the information available to you at the time. |
| II. | You obtain the necessary information from your subordinates, then decide the solution to the problem yourself. You may or may not tell your subordinates what the problem is in getting the information from them. The role played by your subordinates in making the decision is clearly one of providing the necessary information to you, rather than generating or evaluating alternative solutions. |
| III. | You share the problem with the relevant subordinates individually, getting their ideas and suggestions without bringing them together as a group. Then you make the decision, which may or may not reflect your subordinates' influence. |
| IV. | You share the problem with your subordinates as a group, obtaining their collective ideas and suggestions. Then you make the decision, which may or may not reflect your subordinates' influence. |
| V. | You share the problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. Your role is much like that of chairman. You do not try to influence the group to adopt "your" solution, and you are willing to accept and implement any solution which has the support of the entire group. |

#### Individual Problems

| I. | You solve the problem or make the decision by yourself, using information available to you at the time. |
| II. | You obtain the necessary information from your subordinate, then decide on the solution to the problem yourself. You may or may not tell the subordinate what the problem is in getting the information from him. His role in making the decision is clearly one of providing the necessary information to you, rather than generating or evaluating alternative solutions. |
| III. | You share the problem with your subordinate, getting his ideas and suggestions. Then you make a decision, which may or may not reflect his influence. |
| IV. | You share the problem with your subordinate, and together you analyze the problem and arrive at a mutually agreeable solution. |
| V. | You delegate the problem to your subordinate, providing him with any relevant information that you possess, but giving him responsibility for solving the problem by himself. You may or may not request him to tell you what solution he has reached. |

From: Leadership and Decision-Making by Victor H. Vroom and Philip W. Yetton
A. Is there a quality requirement such that one solution is likely to be more rational than another?

B. Do I have sufficient info to make a high quality decision?

C. Is the problem structured?

D. Is acceptance of decision by subordinates critical to effective implementation?

E. If I were to make the decision by myself, is it reasonably certain that it would be accepted by my subordinates?

F. Do subordinates share the organizational goals to be attained in solving this problem?

G. Is conflict among subordinates likely in preferred solutions? (This question is irrelevant to individual problems.)

H. Do subordinates have sufficient info to make a high quality decision?
TABLE C

Model of Decision making in terms of system analysis, system synthesis, and system tools for the improvement of education.

**SYSTEM DESIGN**

<table>
<thead>
<tr>
<th>System Analysis</th>
<th>System Synthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying the Problem</td>
<td>Determining Effectiveness</td>
</tr>
<tr>
<td>Needs assessment</td>
<td>(revised as required)</td>
</tr>
<tr>
<td>Determining Alternatives</td>
<td>Implementing the Solution Strategy</td>
</tr>
<tr>
<td>MBO, behavioral objectives</td>
<td>PERT/CPM Network-based management techniques</td>
</tr>
<tr>
<td>Choosing a solution strategy</td>
<td>Testing, Outcome Evaluation</td>
</tr>
<tr>
<td>PPBS, input-output analysis</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>DESCRIPTION</th>
<th>RELATIONSHIP OF \CHANGEx TARGET TO PLANNING GROUP</th>
<th>TECHNOLOGY OF CHANGE</th>
<th>CONDITIONS FOR EFFECTIVENESS</th>
<th>TECHNIQUES AT WHICH STRATEGY IS INITIATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative</td>
<td>Agreement reached through discussion and joint problem solving</td>
<td>Internal</td>
<td>Social group theory (Lenin)</td>
<td>• Decision centers represented • Willingness to change is present • Communications • Group identity</td>
<td>• Recruitment and selection • Diagnostic assessments • Meetings, reports, self study • Status, legitimacy</td>
</tr>
<tr>
<td>Campaign</td>
<td>Agreement reached through organization, publicity, involvement, and persuasion</td>
<td>Some internal / Some external</td>
<td>Group theory Publicity Organizing</td>
<td>• Planning group committed to objectives • Capacity to develop broad-based organization • Need to generate publicity issue can be accessible to community</td>
<td>• Group method • Formal cooperation Organization and coalition • Public relations</td>
</tr>
<tr>
<td>Power and/or influence</td>
<td>Agreement reached through persuasion and/or pressure</td>
<td>External, but some can be cooperated as internal</td>
<td>Group cohesion Pressure Stewardship</td>
<td>• Ideological acceptance of strategy by community • Willingness to exert influence • Futility or willingness of &quot;target&quot; actor</td>
<td>• Inducements • Trade-offs</td>
</tr>
<tr>
<td>Bargaining</td>
<td>Compromise reached through negotiation and bargaining</td>
<td>Primarily external—may be some decision targets involved</td>
<td>Bargaining and negotiation</td>
<td>• Committed group • Skill at negotiation • Ability to bring decision &quot;center to bargaining table</td>
<td>• Organizing • Bargaining technology • Formal legitimacy or threat</td>
</tr>
<tr>
<td>Conflict</td>
<td>Compromise reached through disruption to bargaining</td>
<td>External only</td>
<td>Disruption Bargaining</td>
<td>• Committed group • Large constituency • Ability and willingness to disrupt • Follow through on negotiation</td>
<td>• External enemy • Organizing • Creating felt need • Role playing</td>
</tr>
</tbody>
</table>

**Summary of Decision-Making Strategies**

Although Table C is described in terms of individual decision-making, it is also applicable to group decision-making on the campus. The administrators in a particular area could identify a problem like student retention and then collectively conduct a needs assessment, develop a management by objectives plan, conduct an input-output analysis, a Pert Chart and testing, outcome evaluation. On the college campus, committees, advisory boards and alumni groups can go through these processes.

Vroom and Yetton

Table B describes group problems that can be solved by an individual or a group. There is a group leader who provides the group with direction and clarity as they go through the process. The group is encouraged to brainstorm for solutions. The flow chart on the second page of Table B describes some of the considerations that come into play. Vroom and Yetton seek solutions that tend to reduce campus conflict.

Edmund M. Burke

Table D presents specific decision-making strategies in terms of conditions for effectiveness, techniques, technology of change and planning phase at which strategy is initiated. Collaborative efforts at the outset have a heavy payoff towards positive group identity. All group decision makers are actively involved and decisions occur through joint problem solving. The campaign, power and/or influence and bargaining strategies are more political. Unfortunately, they occur too often on the campus and frequently replace collaborative efforts.

Conclusions

Individual and group decision-making on the college campus must fully explore all possible appropriate options for the times. Group decisions must satisfy most members for agreement to occur.
Bibliography on Decision-Making


