This paper describes and illustrates the use of a recently developed management simulation-information model, suggesting it as one possible step toward partial solution of two longstanding concerns in educational administration. These problems are (1) the myopic and parochial "problems" view of education and (2) the schism between professor and practitioner. A consideration is made of some ways in which the model might be adapted to existing materials and to practices already in use in educational administration programs. (Author)
CONSIDERATION OF A MODEL: TOWARD POSSIBLE RESOLUTION OF SOME PROFESSIONAL CONCERNS

by

Robert B. Brumbaugh

Report No. 1
February, 1971
CONSIDERATION OF A MODEL:
TOWARD POSSIBLE RESOLUTION OF SOME PROFESSIONAL CONCERNS

by

Robert B. Brumbaugh, Director
Educational Development Center
Kutztown State College
CONSIDERATION OF A MODEL:
TOWARD POSSIBLE RESOLUTION OF SOME PROFESSIONAL CONCERNS

This paper will describe and illustrate the use of a recently developed management simulation-information model, suggesting it as one possible step toward partial solution of two long-standing concerns in educational administration: (1) the myopic and parochial "problems" view of education and (2) the schism between professor and practitioner. Further, a consideration will be made of some ways in which the model might be adapted to existing materials and practices already in use in educational administration programs.

The "Problems" View

In a little-circulated paper presented in 1965, Jean Hills pointed out the shortcomings of the "problems" view in educational administration and advocated more attention in the field to comparative analysis. Citing the conceptual advantages to be gained from the comparative posture, Hills emphasized that "phenomena which appear to be problematical and dysfunctional from the point of view of the educator, appear entirely reasonable and functional from the perspective of the comparative analyst."²

Although the "problems" outlook still characterizes much of the literature in educational administration, the appearance of such journals as Educational Administration Quarterly³ and the Journal of Educational Administration,⁴ stressing organization theory and contributions from the social sciences, has helped ameliorate, to a degree, this myopic orientation. The model to be considered in this paper gives further encouragement to the comparative stance.

Professor vs. Practitioner

Van Miller, as editor of the Educational Administration Quarterly, has commented on the need for rapprochement between the scholar and practitioner in educational administration and has suggested some ways in which this might be affected.⁵
That the schism between professor and practitioner, however, is not endemic to educational administration is evidenced by some recent comments of Dwight Waldo, editor of the *Public Administration Review*.

"I was recently comforted...through reading an article by the editor of the *New England Journal of Medicine*, appearing in *Science*. It appears that the practitioner-academic problem for this editor is much of the same. Researchers and professors, not physicians, are disposed to write. Harried practitioners would like, if you please, helpful hints on curing the common cold, arresting osteoarthritis, early detection of cancer. They are not necessarily thrilled by reports on research on blood chemistry or cell nuclei, however important such research may be for long-term medical advance. I suspect that the problems of editing a broad-spectrum professional journal...have a generic quality."

While suggesting no specific mechanism for accomplishing rapprochement between professor and practitioner in educational administration, Kimbrough also has noted recently the lack of effective communication between these two roles. "Professional development in the past has suffered from a breakdown in effective communication between professors (the so-called theoretical realm) and practicing school administrators." Kimbrough proposes that "the time has come to create some new system-spanning units to promote effective interaction between practitioners, professors, and students."

**One Possible Solution**

An approach offering perhaps a partial solution to both of these "problems" of the profession might be some kind of adaptation and modified use of a model
developed recently by Bernard M. Bass and associates at the Management Research Center, University of Rochester. Through its use, the practitioner or practice-oriented student in educational administration may become coopted to a more scholarly, or abstract, view of administrative reality. (It is recognized, however, that the very nature of the practitioner role may encourage — in fact, require — a more concrete as opposed to an abstract orientation, thereby reducing to more understandable terms the "problem" perceived by the above authors.)

A project of the International Research Groups on Management (IRGOM), the Bass system is based on 15 different simulated exercises used in management training which are designed to provide a series of experiences relevant to personal growth, team building, and organizational development. The exercises are administered to trainees by a trained and accredited cadre of professionals backed up by a central computerized data bank for storage, retrieval, compilation, and analysis of the data resulting from administration of the exercises, and an information-dissemination network including both trainers and trainees. The exercises are translated into 13 different languages and have undergone extensive testing, development and application both in the United States and in some 30 countries throughout the world. The entire simulation-information system is designed to meet the information requirements of a diverse group of users including managers-in-training, trainers, social scientists, and others interested in cross-cultural comparisons of managerial and organizational behavior.

Eight of these exercises were used recently with trainees in educational administration at a southern university during the spring of 1969 and 1970. There were 20 trainees in the 1969 group and 22 trainees in the 1970 group.

Data from two of these exercises, Exercise 4, "Life Goals" and Exercise 5, "Supervise" will be used to describe and illustrate some possible uses of the IRGOM type of system.
Exercise Life Goals

The first exercise to be considered is Exercise 4, "Life Goals." In this exercise each participant ranks the importance of 11 life goals for himself and for each of the other trainees in his particular small group which has worked together previously on other tasks. These life goals include:

a. **Leadership.** To become an influential leader; to organize and control others to achieve community or organizational goals.

b. **Expertness.** To become an authority on a special subject; to persevere to reach a hoped-for expert level of skill and accomplishment.

c. **Prestige.** To become well-known, to obtain recognition, awards, or high social status.

d. **Service.** To contribute to the satisfaction of others; to be helpful to others who need it.

e. **Wealth.** To earn a great deal of money; to build up a large financial estate.

f. **Independence.** To have the opportunity for freedom of thought and action; to be one's own boss.

g. **Affection.** To obtain and share companionship and affection through immediate family and friends.

h. **Security.** To achieve a secure and stable position in work and financial situations.

i. **Self-realization.** To optimize personal development; to realize one's full creative and innovative potential.

j. **Duty.** To dedicate oneself totally to the pursuit of ultimate values, ideals and principles.

k. **Pleasure.** To enjoy life, to be happy and content; to have the good things in life.
Within a training situation these rankings can result in intensive discussions of what people think of themselves, what they think of others and how they are seen by others.

As an illustration of one use of the IRGOM information science approach to simulation, we will contrast the life goal rankings of the educational administration trainees in the spring of 1969 and 1970 with a group of 41 American IRGOM trainers, a group of 20 American managers, a group of 12 Flemish managers, and a group of 54 Norwegian managers.

Results

First let us compare the groups of educational administration trainees from the southern university with each other. It is interesting to note that, despite the differences in their mean ages (1969 group's mean age = 35.7 years vs. 1970 group's mean age = 29.6 years), sexual composition (1969 group had 8 females and 12 males while 1970 group had 2 females and 20 males), and possible treatment differences, the two groups' life goal choices are startlingly alike. (See Table 1.)

The rank-difference correlation between the two is +.97. This may testify to the success of socialization and/or selection effects in professional education generally, and educational administration specifically, at this university.

Next let us compare the differences in response to this same exercise between and among the two southern university groups and the other training groups. One fact immediately apparent is that the educators, as contrasted with the four other groups, weigh leadership less highly. Note that the 20 United States managers ranked leadership as their number one goal while the educators accord it a rank of 7 and 8 respectively. Also, note the differences between the educators and
the other trainees on the life goal of security. It is interesting to speculate on the degree to which these differences in orientation may conform to Hills' applications of the Parsonian framework comparing the views of educators and others.12

Exercise Supervise

The other exercise on which the responses of the educational administration trainees will be compared with other groups of trainees is Exercise 5, "Supervise." (Although the data from the southern university educational administration trainees were gathered by the present writer, much of the following data and discussion were derived from a paper by Thiagarajan and Deep.)13

In Exercise Supervise participants first make individual rating choices from a master list of 25 personal traits, compiling 3 separate lists. The first list comprises those 5 traits each individual participant thinks are most important and those 5 traits he thinks least important for the success of a middle manager in doing his job well. This same procedure is followed in compiling the second list of traits for a top manager and the third list of traits for a foreman.

The trainees then are divided into groups of 6 and are assigned randomly to play one of 6 roles. The 6 roles are composed of 3 supervision styles — "democratic," "persuasive," and "authoritarian" — and 3 subordinate styles — "vitally interested" (or "involved"), "totally disinterested" (or "passive"), and "neither vitally interested nor totally disinterested." None of the 6 group members knows of the role descriptions assigned to the other participants in his group.

After each person's assignment to one of the 6 roles, he is given a brief period of time to familiarize himself with written instructions describing the manner in which the particular role to which he has been assigned is to be performed. Following this, each "supervisor" meets with each "subordinate" for 15 minutes for the purpose of discussing and reaching a common rating agreement, being assigned one of the 3 trait lists they previously had rated as individuals.
At the conclusion of these 3 different 15-minute dyadic supervisor-subordinate meetings during which each of the 3 trait lists has been discussed once, the supervisors are asked to identify the subordinates with whom they were most satisfied in reaching rating decisions. In a similar manner, the subordinates are asked to identify the supervisors whom they preferred.

Table 2 lists the 13 different cross cultural groups being compared on Exercise Supervise, the number of training sessions to which each group was exposed prior to Exercise Supervise, and the language in which the exercise was translated.

Results

As Thiagarajan and Deep discovered, data gathered from 749 managers representing 12 countries reveal that whereas subordinates prefer democratic supervisors, significantly fewer supervisors prefer involved subordinates. This was also the pattern for the '69 and '70 southern university groups of educational administration trainees. (See Table 3.)

To determine if there were differences between supervisors and subordinates in their preferences for leadership styles, Thiagarajan and Deep derived three indices for each group:

1. net preference for democratic supervisor by subordinates;
2. net preference for involved subordinate by supervisors; and
3. conflict score — i.e., differences between supervisors' and subordinates' preferences for the democratic style.
Their derived score for net preference for democratic supervisors was computed as the proportion of subordinates in a given group or country who preferred the democratic supervisor minus the proportion of subordinates who preferred the authoritarian supervisor. Similarly, net preference for involved subordinates was computed as the proportion of supervisors preferring involved subordinates minus the proportion preferring the uninvolved subordinates. The conflict score was computed as the difference between these two net preference scores. Table 3 presents the results thus obtained. (As Thiagarajan and Deep point out, these analyses ignored the intermediate behavior styles — "persuasive supervisor" and "neither vitally interested nor totally disinterested subordinates.")

Their results showed that there were indeed differences in expectations between the supervisory and subordinate roles, across groups and countries. They thought it particularly significant that when results for all the countries were combined, the net preference for the democratic supervisor was higher than the net preference for the involved subordinate. In fact, as they observed, there was a slightly negative net preference for the involved subordinate. Their data revealed that managers prefer bosses who consult with them, but are not as favorably disposed to do the same with their subordinates. A test of proportions between the supervisors' and subordinates' preferences for participation established that these derived conflict scores developed were statistically significant at the .05 level or better for all countries except the Netherlands, United Kingdom, and Denmark. A further indication that the preferences of supervisors and subordinates were not consistent, across countries, is that the scores of net preference for democratic supervisors and net preference for involved subordinates (Column 5 and 6 of Table 3, respectively) did not correlate significantly (product moment correlation = 0.456).

Despite the similarity among countries with regard to the presence of conflict in expectations between supervisors and subordinates, Thiagarajan and Deep noted that there were also large variances indicated in expressed preferences for the
various behavior styles between countries. Column 5 of Table 3 shows that the 12 countries are widely distributed in their net preference for the democratic supervisor with a range of +53.3 to 0. Similarly, Column 6 of Table 3 shows a wide spread in net preference for involved subordinates with a range of +33.3 to -30.8.

Thiagarajan and Deep noted that the list of 12 countries — excluding the southern university '69 and '70 groups — in order of conflict fell naturally into cultural clusters. The "Mediterranean" countries (Columbia, Greece, Spain, France, and Italy) were highest in conflict between supervisory and subordinate preferences with a mean conflict score of 35.0. Countries in the "Anglo-American-Northern European" culture group (United States, Belgium, Switzerland, Netherlands, United Kingdom, and Denmark) were at the lower end of the list with a mean conflict score of 11.5. Thiagarajan and Deep comment that "although the clusters indicated here are rather broad and do not conform closely to the cultural clusters presented by Haire, et al,14 from their survey of 3600 managers from 14 countries, the results clearly point to the fact that the cultural backgrounds of the managers have a bearing on their preference for participation as supervisors and as subordinates."15 It is interesting to note that the pattern of preferences for the southern university educator group parallels, to a degree, those of the Indian trainees.

While it would probably be of great interest to proceed in this manner with further analyses of the data and discussion of their implications, this may be sufficient to illustrate some of the potential residing in the IRGOM management training simulations model. As more and more groups of educational administration trainees' responses to these various exercises become available, it will be interesting to compare them — not only as groups within the same educational subculture, but with other managerial sub-cultural groups and across cultures as well.
Adaptation of the Model

As visible evidence of its concern for improved instructional programs in educational administration over the past dozen years, UCEA has provided the necessary thrust for development of simulations such as the Jefferson, Madison, and other materials. This year, for example, UCEA is introducing the latest in its development of simulations, The Abraham Lincoln Elementary School from the Monroe City Urban Simulation. While all of these simulations have been and are explicitly designed for instructional use and probably will continue to be used mainly for this purpose, the considerable research potential also residing in these well-conceived materials has been neglected. It has been estimated that more than 18,000 trainees from ninety universities in the United States, Canada, Australia, and England have undergone exposure to the now-outdated Jefferson simulation materials, yet most of this rich data is lost.

This paper has presented a model which might be adapted for use with the UCEA materials, so that the research possibilities inhering in them might be more fully exploited. This would involve developing some way of objectifying the responses to, for example, the different simulation in-basket items, establishing a central computerized data bank, adapting the existing simulations to other cultures, translation of the materials into other languages, and expanding the trainer network. Thus, members of the present trainer network which UCEA has established over the years, in connection with its training-for-use requirement for instructors proposing to use its materials, would be involved not only as trainers, but researchers as well (collectors of data), and their trainees would be caught up in the informational network not only as research subjects, but as research consumers.

This might help solve the chronic dissemination problem in educational administration by directly involving the professor and trainee in the data collection and analysis phase of research. Each trainee thereby becomes a consumer of research and a legitimate part of the information network.
With the UCEA simulation materials' great potential for in-service as well as pre-service use, some adaptation and modified application of the Bass model in conjunction with these materials might contribute significantly toward producing the scholar-practitioner advocated by Miller.¹⁷
NOTES


4. Journal of Educational Administration, published by the University of Queensland Press for the Journal of Educational Administration Committee of the University of New England, Armidale, N.S.W., 2351, Australia, first appeared in May, 1963. This journal presents a truly comparative view within the field, providing an outlet for English-speaking scholars and practitioners in educational administration from Australia, Canada, Great Britain, New Zealand, and the United States.


8. Ibid.

9. For a rather complete description of the system, see, for example, Gerald V. Barrett, "The International Research Groups on Management Information System," Technical Report 18, Management Research Center, University of Rochester, January 10, 1968 and Bernard M. Bass and K. M. Thiagarajan, "Transnational Study on
Management: Final Report to the Ford Foundation, "Management Research Center, University of Rochester, December, 1969. IRGOM is presently considering applications of this model to simulation exercises in educational administration.

10. One recent study found 50% of its sample of school superintendents to be concrete. See, for example, Wayne P. Mollenberg and John Delane Williams, "Conceptual Systems Theory and the Superintendent in Teacher Negotiations," ISR Journal, 1 (Winter, 1969), pp. 64-78. Also see the discussion of administrators' "problems" orientation in Robert T. Stout, "Sociology as Power: The University as a Place to Be From," Division Generator, I (May, 1971), 3, pp. 5-6.

11. Aside from the southern university data, part of this discussion and accompanying data was derived from a communication with Dr. Gerald V. Barrett, Management Research Center, University of Rochester, during the spring of 1970 and from "Relative Importance of Life Goals in Various Cultures: Self Images and Perceptions of Others," Brief No. 7, Management Research Center, University of Rochester, December, 1967.


17. Miller, op. cit.
TABLE 1

RELATIVE IMPORTANCE OF LIFE GOALS

<table>
<thead>
<tr>
<th>Life Goals</th>
<th>20 S.U. '69</th>
<th>22 S.U. '70</th>
<th>41 IRGOM* Trainers</th>
<th>20 U.S. Trainers</th>
<th>12 Flemish Managers</th>
<th>54 Norwegian Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>7</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Expertness</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Prestige</td>
<td>10</td>
<td>11</td>
<td>7.5</td>
<td>10</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Service</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Wealth</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Independence</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Affection</td>
<td>1.5</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Security</td>
<td>1.5</td>
<td>1</td>
<td>11</td>
<td>8</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Self-realization</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Duty</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Pleasure</td>
<td>4</td>
<td>4</td>
<td>7.5</td>
<td>7</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>

*These trainers were all from the United States
### TABLE 2a

**COMPARISON OF TRAINEE GROUPS**

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>No. of Sessions</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>94</td>
<td>6</td>
<td>Dutch</td>
</tr>
<tr>
<td>Columbia</td>
<td>26</td>
<td>2</td>
<td>Spanish</td>
</tr>
<tr>
<td>Denmark</td>
<td>37</td>
<td>3</td>
<td>Danish</td>
</tr>
<tr>
<td>France</td>
<td>28</td>
<td>5</td>
<td>French</td>
</tr>
<tr>
<td>Greece</td>
<td>24</td>
<td>2</td>
<td>Greek</td>
</tr>
<tr>
<td>India</td>
<td>39</td>
<td>2</td>
<td>English</td>
</tr>
<tr>
<td>Italy</td>
<td>104</td>
<td>7</td>
<td>Italian</td>
</tr>
<tr>
<td>Netherlands</td>
<td>41</td>
<td>3</td>
<td>Dutch</td>
</tr>
<tr>
<td>Spain</td>
<td>60</td>
<td>4</td>
<td>Spanish</td>
</tr>
<tr>
<td>Switzerland</td>
<td>45</td>
<td>5</td>
<td>French</td>
</tr>
<tr>
<td>U.K.</td>
<td>107</td>
<td>9</td>
<td>English</td>
</tr>
<tr>
<td>U.S.</td>
<td>141</td>
<td>7</td>
<td>English</td>
</tr>
<tr>
<td>S.U. '69 &amp; '70</td>
<td>42</td>
<td>5</td>
<td>English</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>788</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 3a
NET PREFERENCES FOR THE DEMOCRATIC SUPERVISOR BY SUBORDINATES, INVOLVED SUBORDINATES BY SUPERVISORS, AND CONFLICT IN PREFERENCES BETWEEN SUPERVISORS AND SUBORDINATES

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent of Subordinates Who Preferred</th>
<th>Percent of Supervisors Who Preferred</th>
<th>Derived Indexes</th>
<th>Conflict Between Supervisors' and Subordinates' Net Preference For Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Columbia</td>
<td>60.0</td>
<td>6.7</td>
<td>27.3</td>
<td>36.4</td>
</tr>
<tr>
<td>Greece</td>
<td>54.6</td>
<td>18.2</td>
<td>30.8</td>
<td>38.5</td>
</tr>
<tr>
<td>Spain</td>
<td>50.0</td>
<td>12.5</td>
<td>32.1</td>
<td>32.1</td>
</tr>
<tr>
<td>France</td>
<td>46.7</td>
<td>40.0</td>
<td>15.4</td>
<td>46.2</td>
</tr>
<tr>
<td>Italy</td>
<td>49.1</td>
<td>15.1</td>
<td>41.2</td>
<td>35.3</td>
</tr>
<tr>
<td>India</td>
<td>29.2</td>
<td>20.8</td>
<td>26.7</td>
<td>53.3</td>
</tr>
<tr>
<td>U.S.</td>
<td>54.2</td>
<td>16.7</td>
<td>34.8</td>
<td>21.7</td>
</tr>
<tr>
<td>S.U. '69 &amp; '70</td>
<td>23.8</td>
<td>23.8</td>
<td>28.5</td>
<td>52.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>43.8</td>
<td>12.5</td>
<td>47.8</td>
<td>37.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>33.3</td>
<td>33.3</td>
<td>14.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>42.9</td>
<td>33.3</td>
<td>30.0</td>
<td>25.0</td>
</tr>
<tr>
<td>U.K.</td>
<td>54.7</td>
<td>20.8</td>
<td>46.3</td>
<td>13.0</td>
</tr>
<tr>
<td>Denmark</td>
<td>25.0</td>
<td>25.0</td>
<td>23.5</td>
<td>23.5</td>
</tr>
<tr>
<td>Overall</td>
<td>45.3</td>
<td>21.2</td>
<td>30.9</td>
<td>32.9</td>
</tr>
<tr>
<td>Mean</td>
<td>(43.6)b</td>
<td>(21.4)</td>
<td>(30.6)</td>
<td>(34.4)</td>
</tr>
</tbody>
</table>

1. The figures for preferences for democratic and authoritarian styles do not add to 100% since the intermediate styles - persuasive supervisor and neutral subordinate were not included in the analysis.

2. Means in parentheses are the southern university educators' preferences, data not included in the overall country analysis.

*p<.05) two-tailed, test of proportions between Columns 5 & 6.

**p<.01)

The figures for preferences for democratic and authoritarian styles do not add to 100% since the intermediate styles - persuasive supervisor and neutral subordinate were not included in the analysis.
PUBLICATIONS AVAILABLE FROM THE
CENTER FOR EDUCATIONAL CHANGE THROUGH
ORGANIZATIONAL AND TECHNOLOGICAL DEVELOPMENT

Robert M. Emery and W. D. Bateman


Robert E. Brumbaugh, "In 1972, Report No. 3.
