

# Insights into Experiential Pedagogy, Volume 6, 1979

## WHO BENEFITS MOST FROM PARTICIPATION IN BUSINESS POLICY SIMULATIONS: AN EMPIRICAL STUDY OF SKILL DEVELOPMENT BY FUNCTIONAL AREA

Eugene T. Byrne, Southern Methodist University

### ABSTRACT

Henry Mintzberg [5] defines a set of ten roles and eight skills common to all managerial performance. This paper reports a study of a business policy simulation designed to determine if students have sufficient opportunities to perform the ten roles and whether the opportunities are related to simulation roles. Perceived skill development was obtained and tested for any relationship to simulation role. Results indicate that students have sufficient opportunity to perform managerial roles and there is a relationship between opportunities and simulation role. However, there is no relationship between perceived skill development and simulation role.

### INTRODUCTION

Henry Mintzberg in his highly acclaimed study [6], The Nature of Managerial Work [5] concludes that "...we must recognize that although the management school gives students M.B.A. and M.P.A. degrees, it does not in fact teach them how to manage." This is true despite the fact that, "There is clear evidence that all managerial jobs require the incumbent to perform a common set of roles...." Further, Mintzberg notes that, "The one course that might have dealt with the management process --the course in policy--has either been conspicuously absent from the curriculum of the modern management school or it has more often than not been taught by the case method." In reviewing the ability of the case method to teach managerial skills, Mintzberg states that our study gives us reason to believe that this kind of instruction does not develop the wide array of talents managers need."

In his study Mintzberg identifies ten roles which are common to all managers: figurehead, leader, liaison, monitor, disseminator, spokesman, entrepreneur, disturbance handler, resource allocator, and negotiator [5, pp. 92-93].

The purpose of this paper is to report the results of an empirical study of a course in business policy. The course utilized The Executive Game [3] as the sole instructional method. The research that was conducted had three purposes:

1. to determine whether students in the simulation had sufficient opportunity to exercise each of the ten managerial roles identified by Mintzberg;
2. to determine if there is a relationship between the functional areas of concentration and the managerial role opportunities reported by students;
3. to determine if there is any relationship between the number of role opportunities and the perceived learning of students.

### THE STUDY

The study was conducted in a senior business policy course enrolling twenty-seven students. The simulation was composed of seven teams of which six had four members and one had three. The teams formed voluntarily and selected their own form of organization. Most teams organized along formal lines while one team elected the consensual form of organization. For purposes of analysis the simulation roles were categorized into President, V-P Marketing, V-P Finance, V-P Planning and Other (including consensus).

Periodically students were asked to complete a questionnaire reporting on whether they had any opportunity to perform a managerial role in the events leading up to a given simulation decision (Sample--Appendix I). Each questionnaire directed attention to five specific managerial roles and was administered three times during the semester. Students were informed that their specific responses would not be graded but participation was viewed as a professional development activity that would be worth five percent of the

TABLE 1  
PROPORTION REPORTING AT LEAST ONE OPPORTUNITY

Simulation Manager Role	President	V.P. Market- ing	V.P. Fi- nance	V.P. Plan- ning	Other
Figurehead	.933	.909	.733	.700	.900
Resource Allocator	.867	.455	.733	.700	.800
Spokesman	.933	.818	.867	.900	.700
Disturbance Handler	.467	.364	.467	.600	.450
Liaison	.867	.818	.600	.800	.850
Entrepreneur	.786	.667	.778	.615	.143
Monitor	.500	.444	.722	.692	.786
Leader	.714	.556	.556	.538	.714
Disseminator	.500	.778	.556	.769	.714
Negotiator	.429	.111	.111	.308	.143

final course grade.

At the end of the semester students were asked to complete a perceived learning questionnaire (Appendix II).

### Managerial Roles

The results of the managerial roles questionnaires are shown in Table 1. Cell entries represent the proportion of time that students in each simulation role reported at least one opportunity to perform each managerial role.

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Whether these proportions represent sufficient opportunity appears to be arbitrary. However David Kolb has quoted O. K. Moore to the effect that "One environment is more conducive to learning than another If it both permits and facilitates the taking of more perspectives toward whatever is to be learned." [4, p. 17] Applying a conservative interpretation to this statement suggests that sufficiency can be represented by at least equal proportions of opportunity/no opportunity. Thus any proposition in Table 1 > .500 will be considered as sufficient opportunity. Using this criterion, the data in Table 1 reveals that students may not have had adequate opportunity to serve as disturbance handler or negotiator. Generally it would appear that students did have sufficient opportunities to serve the other eight managerial roles.

### Managerial Roles/Simulation Roles

Further examination of the data in Table 1 reveals that students serving as V.P. Planning reported sufficient opportunities to serve nine manager roles. While students serving as Presidents or V.P. Finance indicated they had sufficient opportunities to serve eight of the managerial roles. Finally, those students who served in Other roles (consensus, V.P. Production) reported sufficient opportunities for seven roles while V.P. Marketing reported sufficient opportunities for only six of the ten managerial roles.

### Perceived Skill Development/ Simulation Roles

The final question to be examined is whether the simulation roles are related to the amount of perceived skill development reported by students in the end of semester questionnaire. To facilitate the use of the framework provided by Mintzberg, the responses to the twenty questions in the skills questionnaire were combined into the eight categories of managerial skills specified by Mintzberg [5, pp. 188-193]. The results are shown in Table 2 as average skill development scores.

TABLE 2  
SKILL DEVELOPMENT BY FUNCTIONAL ROLE  
Scale: 1=high 6=low  
Q. = Question(s)

Simulation Manager Role	President	V.P. Market- ing	V.P. Fi- nance	V.P. Plan- ning	Other
Peer, Q. 9, 14, 17	1.933	1.762	2.083	2.500	2.056
Leadership, Q. 15	2.400	2.070	2.750	2.750	3.000
Conflict Reso- lution, Q. 16	2.200	2.570	2.250	2.500	1.833
Info. Process- ing, Q. 2, 7, 13	1.933	1.762	2.250	2.083	2.056
Decision-Making Under Ambi- guity, Q. 3, 10	1.600	1.429	2.000	1.125	1.750
Resource Allo- cation, Q. 4, 5, 6	2.214	1.857	2.500	1.833	1.889
Entrepreneur, Q. 1, 19	2.300	2.214	2.625	2.500	1.917
Introspection Q. 8, 11, 12, 18, 20	2.240	2.214	2.350	3.200	2.670
Overall Average Skill Score	2.920	1.957	2.325	2.387	2.176

A t-test of significant differences was calculated comparing the skill development scores for individual skills and for the average overall skill. There were no significant differences in any of the comparisons. Therefore we can conclude that simulation role is not related to perceived skill development.

## DISCUSSION

The findings of this study indicate that students have sufficient opportunity to perform eight of the ten managerial roles performed by managers in actual practice. However, there was not adequate opportunity for students to serve as disturbance handlers or negotiators. Since the most common expression of the negotiator role is found in labor negotiations, merger-acquisition discussions and other non-routine negotiations with individuals or organizations, its absence in this study is understandable. None of these circumstances are built in to The Executive Game. However the failure to provide opportunities to serve as disturbance handler are not as easily explained. Mintzberg notes that common disturbances are a feud between two subordinates, the sudden departure of a subordinate or the loss of an important customer [5, p. 84]. From observation, these events were not unusual in The Executive Game. But they may have been so infrequent (e.g., no student dropped the course once it began) that they were disregarded. In the authors opinion, these findings suggest that a business policy simulation can provide opportunities for a true managerial experience. This is in contrast to some previous studies [1, p. 121].

The failure of students serving as V.P. Marketing to report sufficient manager role opportunities is surprising. The Executive Game places heavy emphasis on successful marketing management. This result is even more surprising in light of the relative success of V.P. Planning students to perform more managerial roles. The answer may be found in the fact that there is such a strong marketing emphasis that students in this function must focus solely on marketing problems. Planners, on the other hand, having no specific area responsibility may periodically engage themselves with every facet of the firms operations. Presidents, who could have been expected to report the greatest proportion of opportunities may have spent too much time coordinating activities in order to eliminate the problem of presiding over a peer group. In any event, the results of this study do not support the fairly popular contention that "...having only one group leader throughout the exercise (as in many previous simulations) prevents the three or four remaining members of the team from experiencing managerial responsibilities." [1, p. 125].

This conclusion is given further support by the finding that perceived skill development is not related to the simulation roles taken by students. A number of factors in administering the simulation can contribute to this finding. First, students voluntarily created teams and were permitted to choose their own roles and form of organization. Second, performance evaluation was designed to be a function of cooperation and sharing. In addition to a team grade the final paper evaluating the teams performance was jointly prepared and written. Even the individual papers fostered cooperation and overview by permitting and encouraging all members to help each other in preparing to write papers on different aspects of the simulation.

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## CONCLUSIONS

The results of this study suggest that a business policy simulation can provide students a rich managerial experience by providing them with sufficient opportunities to perform the roles of real-world managers. Although the opportunity to perform each role is somewhat dependent upon the simulation role taken by a student there is no indication that this creates significant differences in perceived development of the important managerial skills.

### APPENDIX I

#### SKILLS ACQUISITION EVALUATION

Social Sec.# \_\_\_\_\_

Rate this course on the extent to which it has actually helped you. (Circle the number which most represents your opinion.)

1. Increase your ability to identify problems.  
Very much 1 2 3 4 5 6 Not at all
2. Integrate learning from functional areas: (accounting, finance, marketing, etc.)  
Very much 1 2 3 4 5 6 Not at all
3. Gain a top management perspective on the operation of a complex organization.  
Very much 1 2 3 4 5 6 Not at all
4. Increase your competence for planning business operations.  
Very much 1 2 3 4 5 6 Not at all
5. Increase your ability to implement your ideas and plans.  
Very much 1 2 3 4 5 6 Not at all
6. Gain confidence in your ability to solve practical problems.  
Very much 1 2 3 4 5 6 Not at all
7. Gain new knowledge about operating a business.  
Very much 1 2 3 4 5 6 Not at all
8. Increase your confidence in your ability to work independently.  
Very much 1 2 3 4 5 6 Not at all
9. Increase your effectiveness as a participant in group problem solving.  
Very much 1 2 3 4 5 6 Not at all
10. Learn how to make decisions on basis of incomplete information.  
Very much 1 2 3 4 5 6 Not at all
11. Learn something important about yourself as a manager.  
Very much 1 2 3 4 5 6 Not at all
12. Clarify your career interests.  
Very much 1 2 3 4 5 6 Not at all
13. Add to your understanding of how to seek and use information for problem solving.  
Very much 1 2 3 4 5 6 Not at all
14. Add to your ability to provide meaningful feedback to team members.  
Very much 1 2 3 4 5 6 Not at all
15. Motivate people who work with you.  
Very much 1 2 3 4 5 6 Not at all
16. Learn to help people resolve conflicts.  
Very much 1 2 3 4 5 6 Not at all
17. Increase your ability to communicate clearly and effectively with your peers.  
Very much 1 2 3 4 5 6 Not at all

### APPENDIX I (Cont'd)

18. Become more introspective about yourself.  
Very much 1 2 3 4 5 6 Not at all
19. Experiment with new behavior.  
Very much 1 2 3 4 5 6 Not at all
20. Learn new behavior.  
Very much 1 2 3 4 5 6 Not at all

### APPENDIX II

#### SAMPLE QUESTIONS

Social Sec.# \_\_\_\_\_

To answer the following questions please think about your activities leading up to decision # \_\_\_\_\_. Some of your activities were social, some may have taken place within the context of your assistantship, others may have been pure leisure but many were undertaken in connection with your course work in the MBA program. Think for a few minutes about activities in which you were engaged that were connected with this decision. These activities could have occurred anywhere--in class, in the lounge or library, at home, in a work group, or even on the telephone.

1. In the context of your coursework did you have an opportunity to perform any activities only because of your title or position?  
\_\_\_\_yes, one opportunity \_\_\_\_yes, more than one opportunity  
\_\_\_\_no opportunity

If your answer is yes, describe the situation in which the opportunity arose (where did it take place? who was involved? what was your role?). If you had more than one opportunity, use the one that you remember best.

What was your response to this opportunity? For each statement circle the number that best describes your response. If the statement does not apply at all check the box marked Not Applicable. Only answer this section if you marked "Yes" above.

- a. — Not Appli- I thought about 1 2 3 4 5  
— cable how these al- Somewhat Extensively  
ternative actions  
might apply to a  
totally different  
situation.
- b. — Not Appli- I thought about 1 2 3 4 5  
— cable the opportunity Somewhat Extensively  
in relation to  
my own personal  
career and learn-  
ing objectives.

2. In the context of your course work did you have an opportunity to allocate scarce resources (time, money and space) to others?  
\_\_\_\_yes, one opportunity \_\_\_\_yes, more than one opportunity  
\_\_\_\_no opportunity

If your answer is yes, describe the situation in which the opportunity arose (where did it take place, who was involved? what was your role?). If you had more than one opportunity, use the one that you remember best.

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