# Developments in Business Simulation & Experiential Exercises, Volume 10, 1983

## PROFESSORS' RATINGS OF BUSINESS POLICY LEARNING METHODS

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#### **ABSTRACT**

Preferences for four Business Policy learning methods are rated by Business Policy professors. The findings are most favorable to case analysis; less favorable data are reported for computer simulations and other experiential techniques. However, the findings are not perceived by the writers as pessimistic as regards either simulation or experiential learning techniques.

#### INTRODUCTION

Several reports have indicated the positive aspects of games as learning methods. Rais (5) found games to be efficient for acquiring content knowledge. Robana (6) reported numerous learning results. Shim (7) reported positive student learning responses. Further, as we meet in discussion sessions and informally in groups at ABSEL each year, we, as a professional interest group, generally endorse simulations and games as useful learning techniques.

Other investigators have recently focused attention on simulation games and experiential learning techniques in industry. Examples are the Thompson and Pitts (9) panel at the 1980 ABSEL meeting and the Hunter and Price (2) article in Industry Week.

Less positive findings were reported by Summers and Boyd at the 1982 ABSEL meetings (8). They surveyed executives from seven industrial groups. These respondents indicated a preference for cases and lecture/discussion as learning methods in the Business Policy course.

In recent ABSEL meetings the membership has been encouraged to present research that can be replicated and to build a research base by replicating and extending previous research. The data reported here is a replication of the Summers and Boyd study utilizing a sample of Business Policy professors.

The data here reported provides Business Policy professors' ratings of Business Policy learning methods. questionnaire item was presented as follows:

Considering the student's future application of Business Policy concepts to their career in a company, what learning method do you believe is best? (Please rate 1 through 5) Please mark those about which you have no knowledge with a 6.

- Lecture/discussion
- Computer simulation game
- Case analysis
- Other experiential exercises

The respondents had previously been instructed that 1 was the most favorable or positive rating and that 5 was the least favorable or most negative rating. A systematic random sample of 200 was drawn from the membership of the Academy of Management's Business Policy and Planning Division. Fifty-seven usable questionnaires were returned, representing a 28.5 percent response rate.

### **FINDINGS**

#### Tables 1-4

The mean ratings given by the respondents were crosstabulated in four ways; the results are presented in Tables 1-4. Table 1 presents the responses based on the respondents' academic rank. Cases received the highest overall mean rating, and the ratings were fairly consistent across all academic ranks. Lecture/ discussion received a slightly higher rating than computer simulation games, and other experiential exercises received the lowest rating.

In Table 2, the responses were classified by the respondents' length of graduate-level Policy teaching experience. The order in which the four learning methods were rated was the same as in Table 1, The magnitude of the ratings was also very similar, except that cases received a much higher mean rating by professors with more than 20 years of graduate teaching experience.

The responses were further classified by the professors' length of undergraduate Policy teaching experience, and once again the previous ranking and magnitude of the mean ratings emerged, as revealed in Table 3. For cases, one can see a pattern of progressively higher ratings as length of undergraduate teaching experience increases beyond six

The overall pattern holds once again in Table 4, where the respondents were classified by length of nonacademic management experience. Curiously, respondents with more then 20 years of management experience gave a much lower mean rating to cases than did any other group, and they also rated all four learning methods fairly evenly.

A number of the standard deviations throughout all four tables are greater than 1.0; given the 1-5 scale this would appear to indicate somewhat diverse Opinions.

The overall pattern of responses, however, is consistent across all four tables. The pattern indicates that the Business Policy learning methods were rated in the following order of preference:

- Cases
- Lecture/discussion
- Computer simulation game Other experiential exercises

## Table 5

Tables 1-4 are averaged responses. Table 5 presents the frequencies. For those interested in replicating or extending this research, the frequencies may be

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useful. Frequencies also provide findings that may be obscured by means. For instance; (1) while 31 professors rated Lecture/Discussion favorable, 20 did not, (2) evidently 20 percent of our sample had little knowledge of experiential learning, and (3) not more than 20 percent rated simulations and experiential exercises extremely negatively.

Table 5 reveals the same general pattern as Tables 1-4. The data, however, depending on one's perception of a 3 rating-and whether one perceives the glass one-half full or one-half empty-- can lead to more positive conclusions regarding simulation and experiential learning.

#### DISCUSSION

The overall order of preferences for Business Policy learning methods revealed in this study is the same as that found in the Summers and Boyd (8) study of practicing executives. This would seem to indicate that the Policy learning methods practicing executives believe to be best are probably the ones being most used in the classroom.

Professors with more than 20 years of nonacademic management experience tended to give similar ratings to all four learning methods. Perhaps these more seasoned management veterans perceive value from blending a variety of learning methods, and perhaps they are less traditionally attached to any specific learning approach.

Conversely, when teaching experience alone was the classification criterion, the pattern that emerged was the tendency for increasing years of undergraduate Business Policy teaching experience to lead toward a steadily increasing preference for cases. This phenomenon forms an interesting contrast to the ratings of those with more years of management experience.

The relatively large standard deviations reported for several class groupings in the tables may--at least in part--be a function of relatively small class sample sizes. Before dismissing them too quickly on that basis, the plausible explanation that they may represent very diverse opinions of the various learning methods should be investigated. It would appear that further research might be directed toward attempting to discover the underlying reasons for Business Policy professors' ratings of these learning methods. For example, do the attitudes and levels of preparation of their students play an important role in shaping professors preferences? Understanding any such interacting relationships should advance our knowledge of when, for instance, simulation or experiential exercises are selected as an instructional technique.

#### Possible Errors in Research Design

Although the question requested a <u>rating</u>, inspection of the data does seem to indicate that the <u>respondents ranked</u> the learning methods. i.e., no duplicate <u>ratings</u> were obtained on 27 of the questionnaires.

Combining <u>Lecture/Discussion</u> as a category may be in error; some respondents made notes that this was not an acceptable category.

The data do not indicate all of the respondent's experience. For example, we did not ask the respondent the extent of their experience with any one learning method--in fact, we do not know which respondents have the facilities necessary to utilize a computer game simulation.

#### Recapitulation and Extension

Clearly about 31 percent of the respondents are favorable toward computer simulation games, and about 21 percent are negative toward these learning methods. Very clear, also, is the favorable rating of case analysis.

We prefer to view the results of the survey as finding the glass 30 percent full as compared to 70 percent empty. We also would like to submit for consideration that case analysis is closely related to experiential learning. Does one experience, albeit vicariously (or at least secondhand), the situation of the case?

It does seem to the writers that the role of simulation and experiential learning is perceived by a reasonable number of the respondents as a useful learning technique. Further, the continued development of simulation and experiential techniques is supported by the findings.

TABLE Professors Main Rating of Policy Teaching Methods Based on Academic Rank

	Teaching Method									
	L/D		Games		Ca		Other Experiential			
Academic Rank	<u>X</u>	S.D.	<u>x</u>	S.D.	<u>X</u>	S.D.	<u>X</u>	S.D.		
Professor (n = 20)	3.3	1.3	2.9	1.2	1,4	.9	3,3 (a=	1.4 =16)		
Associate Professor (n = 18)	2.3	1.3	3.6	1.4	1.7	1.2	3.1 (n:	3.1 =17)		
Assistant Professor (n = 11)	2.7	1.6	3.1	1.1	.2.6	1.0	3.8 (n=	1.7 =10)		
Other $(n = 8)$	2.1	1.2	2.7	1.7	1.7	.9	2.9 (n	1.2 n=8)		
Total $(n = 57)$	2.7	2.4	3.1	1.3	1.6	1.0	3.3 (n=	1.5 =51)		

1-highest rating 5=lowest ratio:

Professors' Mean Ratings of Policy Teaching Methods Based on Length of Graduate Policy Teaching Experience

roan, of Teaching Experience:	Teaching Method								
•	LID	Game		Case		Other			
							Experiential		
Graduate Policy		S.D.		LI	X	LL.	X LL.		
3 (n - 17)	2.5	1.3	2.8	1.3	1.5	.9	3.61.6		
							In - 16)		
3-5 In - 11)	3.1	1.4	3.5	1.3	1.9	1.4	3.7		
							1.3		
							(n - 9)		
6-10 (n • 10)	2.7	1.5	2.6	1.1	1.3	.7	3.3		
							1.1		
10-20 (n - 7)	3.4	1.1	3.3	1.3	2.1	1.5	2.0.8		
							(n - 4)		
,20 In - 4)	3.2	1.3	3.0	.8	1.0	0	3.2		
							1.7		
C1.						0			
Total Sample (n.49)	2.9		3.0		1.6		3.3		
							(n = 43)		

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Years of Teaching	Tasching Method										
Exper lence:	1/0				Case		Other Experiential				
Undergreduate Policy	Ī	5,0,	Ī	S.D.	Ī	ž.D.	<u> </u>				
:) (a = 11)	2.7	1.5	2,6	1.1	1.9	1.3	2.5 1.3 (n = 10)				
3-5 (a = 14)	2.7	1.3	3.0	1.3	1.9	1,4	4.1 1.6 (n = 12)				
6-10 (s = 15)	2.8	1.5	2.8	1,6	1.4	.7	3.4 1.3 (a = 14)				
10-20 (n = 4)	3,0	.8	1.5	1.9	1.2	.5	3.0 :.0 (a = 3)				
>20 (a = 5)	3,4	.8	3.0	1ء۔	1.0	0.0	4.2 .5				
Total Sample (a = 49)	2.6	1.4	2.9	1,3	1.6	1.1	1,4 1.4 (a = 14)				

# Professors Meson Retries of Policy Teaching Methods Sessed on Langth of Nonecodemic Menagement Experience

Years of Monacademic	Teaching Method									
Nanagement Experience	1/0				Case		Other Experiential			
	<u> I</u>	3.0.	ì	3.D.	ž	5.D.	<u> 1 1.0.</u>			
<3 (m = 12)	2.4	1.2	3.2	1.9	1.5	.7	3.2 1.3			
3-5 (n = 8)	2,5	1.5	3.0	.5	1.5	.\$	2.3 .9 (n = 7)			
6-10 (n = 13)	3.0	1.5	2,5	1.0	1.5	1.2	4.0 1.6 (m = 10)			
F0-50 (# * F2)	1.6	1,4	3,8	1.1,	1.1	-4	3.1 1.3 (n = 12)			
>20 (n = 10)	3.0	1.6	2.8	1.5	2.3	1.6	2.9 1.4 (n = 9)			
Total 5 caple (u = 56)	2.7	1.4	1.1	1.4	1,5	1,0	3.3 1.5 (a = 50)			

#### Table 5 Teaching Methods Frequency of Rating

	1	2 3	3 #E7# <b>E</b>	7reque	ney 5	. 6_	
Lecture/Discussion	13	18	6	12			
Computer Simulation	,	11	23	7	5	4	
Case Analysis	39	9	5	2	2		
Other Experiential Exercises	5	11	18	6	5	6	6

- 1 most positive, 5 lesst positive
- 6 = no knowledge 7 = missing value

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